Department of Natural Resources

Newfoundland
Labrador

Annual Performance Report
2009-10

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Message from the Minister

Newfoundland Labrador

Natural Resources

Speaker of the House of Assembly

Dear Mr. Speaker:

In accordance with the *Transparency and Accountability Act*, I hereby submit the 2009-10 Annual Performance Report for the Department of Natural Resources. The report includes the Mines and Energy Branches of the department and the Forestry and Agrifoods Agency.

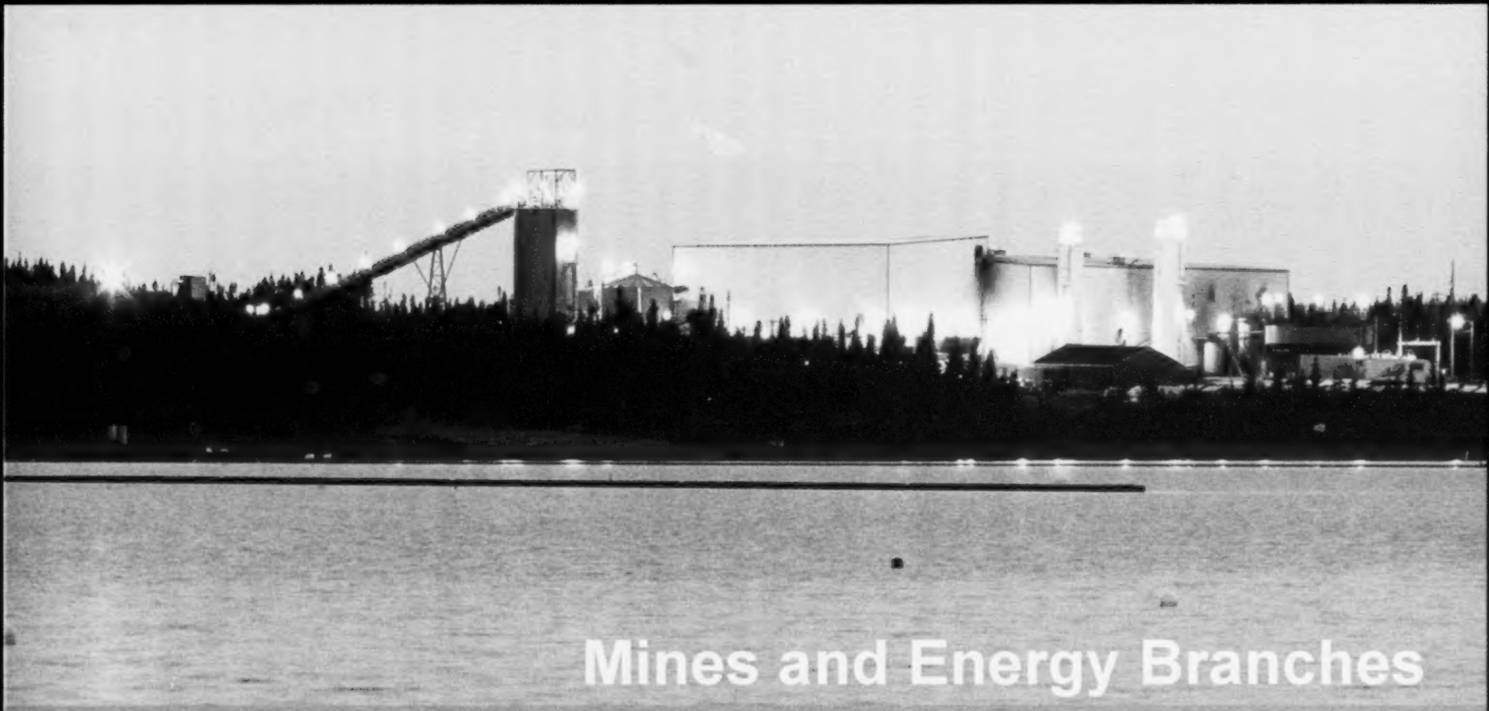
The outcomes reported reflect government's strategic direction for the province's natural resources. My signature below is indicative of my accountability for the actual results reported.

Sincerely,

Kathy Dunderdale

KATHY DUNDERDALE
Minister

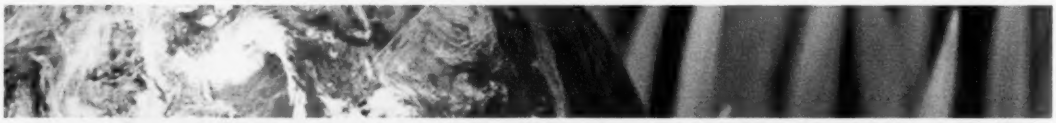
Mines and Energy Branches



TERRA NOVA FPSO

Photo Credits, previous page:

Top: Teck Duck Pond Operations, Mine Site at Night (Teck)
Bottom: Terra Nova FPSO (Suncor)



Mines and Energy Branches

Introduction

The 2009-10 fiscal year marked a significant period for the Department of Natural Resources (the department) and the province as a whole with numerous accomplishments and milestones in the mines and energy sectors. The following section provides an introduction to these sectors which are of vital importance to the province's overall economy.

Energy

Newfoundland and Labrador is an established, significant and growing net energy producer. Few jurisdictions in North America can match the immense combined value of the province's energy resources, which include oil, gas, hydroelectricity, and other sources. The figure below provides an overview of Newfoundland and Labrador's energy warehouse.

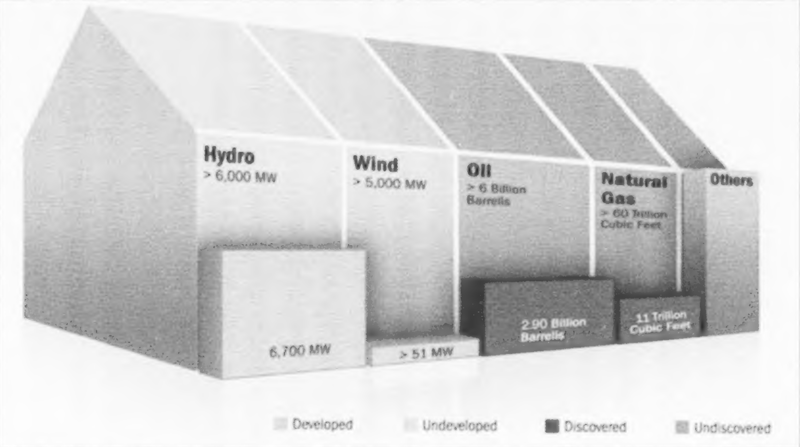


Figure 1 – Energy Warehouse

The oil and gas industry has become an increasingly important part of Newfoundland and Labrador's economy since oil production began at the Hibernia oil field in 1997. The industry accounted for almost 40 per cent of the province's nominal Gross Domestic

Product (GDP) for 2008 and over two per cent of provincial employment in 2009. In the national context, Newfoundland and Labrador currently produces about 35 per cent of Canada's conventional light crude oil.

The province's three large-scale oil producing projects have produced more than one billion barrels of oil since Hibernia first began producing. In 2009, the province's offshore region produced an average of 267,000 barrels of oil per day. The existing Hibernia, Terra Nova and White Rose oil projects will soon welcome a fourth development to the offshore region. Hebron is scheduled to enter the construction phase in 2012.

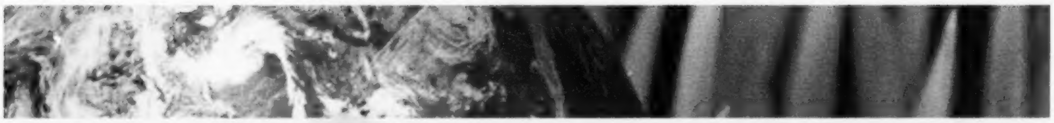
In addition to oil and gas, the province is home to tremendous stores of clean, renewable and economic hydro and wind energy. The generating capacity of the Upper Churchill hydroelectric facility in Labrador is 5,428 megawatts (MW), with the bulk of production going to export markets. The province is progressing towards the development of the lower portion of the Churchill River to generate another 3,074 MW through the Lower Churchill Project. Newfoundland and Labrador Hydro (Hydro) also operates the 604 MW Baie d'Espoir hydro plant and the 490 MW Holyrood thermal plant, and numerous smaller hydro, wind and diesel facilities.

"Few other North American jurisdictions can come close to our energy warehouse of oil, natural gas, hydroelectric and wind resources. Industry is taking notice."

Minister Dunderdale

Mining

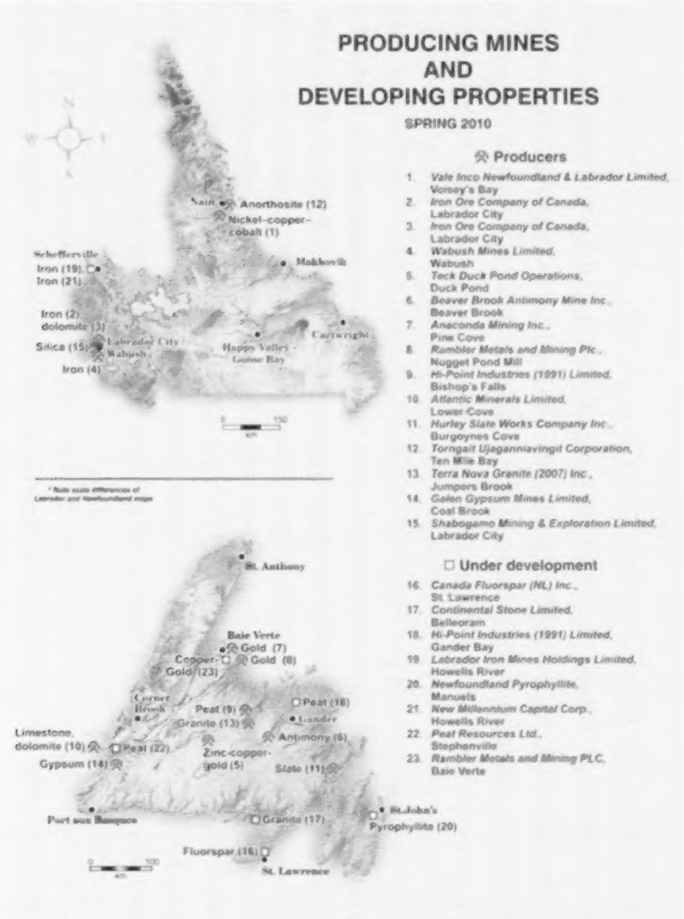
The mining sector is also a significant contributor to the provincial economy and in 2008, this sector accounted for approximately 11.5 per cent, or about $3.4 billion, of nominal GDP in Newfoundland and Labrador. The province is Canada's main producer of iron ore and its second-highest producer of nickel. The construction of the Long Harbour hydromet plant represents one of the largest mining infrastructure projects undertaken in Canada in 2009 and, when finished, the province will be a significant producer of finished nickel metal. Iron ore, nickel and copper together form 92 per cent of the gross value of production with the rest of the province's production comprised of gold, zinc, antimony, industrial minerals and dimension stone.



Mines and Energy Branches

The provincial mining sector hit a record value of $3.9 billion in 2007. In 2009, the mining sector exported almost $1.8 billion to primary export markets for minerals in the United States, Europe, the Middle East, Japan and China. The steep decline experienced in 2009 was due to falling prices and industry shutdowns resulting from the financial crisis of late 2008. Recovery started to occur in mid-2009 and the forecast Gross Value of Mineral Shipments (GVMS) for 2010 is $2.6 billion.

There are 15 producing mines in Newfoundland and Labrador including six operations in Labrador and nine on the Island portion of the province.


PRODUCING MINES
AND
DEVELOPING PROPERTIES
SPRING 2010
N
W
E
S
Nain
Anorthosite (12)
Nickel-copper-cobalt (1)
Makkovik
Schefferville
Iron (19)
Iron (21)
Iron (2)
dolomite (3)
Silica (15)
Labrador City
Wabush
Iron (4)
Happy Valley - Goose Bay
Cartwright
0
150
km
St. Anthony
Baie Verte
Gold (7)
Copper-Gold (23)
Gold (8)
Corner Brook
Peat (9)
Granite (13)
Peat (18)
Gander
Limestone, dolomite (10)
Peat (22)
Gypsum (14)
Zinc-copper-gold (5)
Antimony (6)
Slate (11)
Port aux Basques
Granite (17)
St. John's
Pyrophyllite (20)
Fluorspar (16)
St. Lawrence
0
100
km

Producers

1. *Vale Inco Newfoundland & Labrador Limited*, Voisey's Bay
2. *Iron Ore Company of Canada*, Labrador City
3. *Iron Ore Company of Canada*, Labrador City
4. *Wabush Mines Limited*, Wabush
5. *Teck Duck Pond Operations*, Duck Pond
6. *Beaver Brook Antimony Mine Inc.*, Beaver Brook
7. *Anaconda Mining Inc.*, Pine Cove
8. *Rambler Metals and Mining Plc.*, Nugget Pond Mill
9. *Hi-Point Industries (1991) Limited*, Bishop's Falls
10. *Atlantic Minerals Limited*, Lower Cove
11. *Hurley Slate Works Company Inc.*, Burgoynes Cove
12. *Torngait Ujaganniavingit Corporation*, Ten Mile Bay
13. *Terra Nova Granite (2007) Inc.*, Jumpers Brook
14. *Galen Gypsum Mines Limited*, Coal Brook
15. *Shabogamo Mining & Exploration Limited*, Labrador City

☐ **Under development**

16. *Canada Fluorspar (NL) Inc.*, St. Lawrence
17. *Continental Stone Limited*, Belleoram
18. *Hi-Point Industries (1991) Limited*, Gander Bay
19. *Labrador Iron Mines Holdings Limited*, Howells River
20. *Newfoundland Pyrophyllite*, Manuels
21. *New Millennium Capital Corp.*, Howells River
22. *Peat Resources Ltd.*, Stephenville
23. *Rambler Metals and Mining PLC*, Baie Verte

Figure 2 – Producing Mines and Developing Properties

Overview of the Department

The Department of Natural Resources was established under the *Executive Council Act* and is a category one government entity under the *Transparency and Accountability Act*. The department's responsibilities for natural resource development in the mining and energy sectors are provided through the Mines and Energy Branches.

Vision

The vision of the Department of Natural Resources is a province that realizes the full benefit from the sustainable development of its natural resources.

Mission Statement

By March 31, 2011, the Mines and Energy Branches will have enhanced departmental programs and services to optimize the benefits received from mines and energy resource developments and promoted the sustainability of these sectors.

Mandate

The mandate of the Mines and Energy Branches includes supervision, control and direction of all matters relating to promotion, exploration and development of mineral and energy resources and related industry developments including:

- mines, minerals, quarries, and quarry materials;
- onshore petroleum resources;
- offshore petroleum resources, managed jointly with the federal government;
- electrical generation and transmission;
- overall responsibility for provincial energy supply and demand;
- development, monitoring, supervision, assistance or other government intervention into any of the industries as described above;
- petroleum royalties and associated matters, within or outside the province; and
- identifying, assessing and monitoring industrial benefits commitments from major resource development projects.

Mines and Energy Branches

For a complete list of all legislative responsibilities that inform the departmental mandate, please see the Department of Natural Resources 2008-11 Strategic Plan or government's website: http://www.assembly.nl.ca/Legislation/sr/NaturalResources.htm.

Mines Branch

The Mines Branch is divided into three main divisions:

The **Mineral Development Division** is responsible for the approval and permitting of mining operations through the *Mining Act*; the administration of the Mineral Incentive Program; the collection, analysis and publication of mineral production data; and the assessment and remediation of abandoned mine sites across the province.

The **Mineral Lands Division** is responsible for the administration of mineral land tenure through the *Mineral Act* and the *Mineral Holdings Impost Act*, which includes the issuance of exploration licenses and production leases; the administration of quarry material rights and developments through the *Quarry Materials Act*; the issuance of exploration approvals and follow-up inspections; and the maintenance of the core library system.

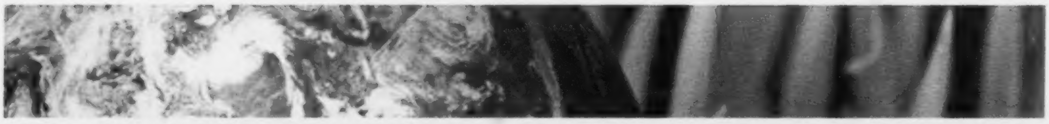
The **Geological Survey Division** is responsible for mapping and interpreting the province's bedrock geology and surficial material; conducting geochemical and geophysical surveys; mineral deposit studies; the maintenance and publication of maps, reports and databases concerning the geological and mineral endowment, including Geographic Information System (GIS) based databases and web-delivery; and promoting the province's mineral exploration potential.

Energy Branch

The Energy Branch is divided into three main sections, each made up of several divisions.

The **Petroleum Development Section** is responsible for fostering the exploration, development and production of the province's hydrocarbon resources and provides geological, geophysical, engineering, and regulatory services. Responsibilities include:

- the provision of technical services in the areas of petroleum geoscience, petroleum engineering and petroleum operations to facilitate sustainable



development and management of petroleum resources both onshore and offshore; and

- the provision of marketing and promotional services to foster the exploration, development and production of the province's hydrocarbon resources internationally.

The **Royalties and Benefits Section** is responsible for maximizing the benefits to the local economy from the development of major resource projects. Responsibilities include:

- the maximization of fiscal benefits to the province from petroleum resource development through the negotiation, development, administration and monitoring of project agreements and legislation;
- the auditing of project costs and revenues to verify the accuracy of royalties paid to the province;
- the provision of overall energy economic/financial and supply/demand information review, analysis and advice for resource management decisions; and
- the maximization of industrial benefits to the local economy from the development of major mining and energy projects through negotiation of benefits commitments, benefits monitoring and international promotion of the province's industrial capacity and capabilities.

The **Energy Policy Section** is responsible for developing, planning and coordinating policy matters relating to the province's energy sector. Responsibilities include:

- the management/co-management of onshore and offshore petroleum exploration and development and regulatory compliance and development;
- electricity industry governance and structure, electricity industry markets and alternative energy and responsibility for the *Electrical Power Control Act;*
- the provision of technical, economic, analytical and program design expertise to government to enable informed decisions on matters relating to energy efficiency;
- the design and/or delivery of specific energy efficiency programs and services; and,
- general policy, planning and coordination in the energy sector, including a lead role in the implementation of the provinces Energy Plan.

Mines and Energy Branches

Employees

As of March 31, 2010, the Department of Natural Resources' Mines and Energy Branches had 193 staff members.

Branch	*Female*	*Male*	**Total**
Mines	31	61	92
Energy	24	20	44
Financial Operations[1]	13	9	22
Executive Support[2]	19	16	35
Total[3]	**87**	**106**	**193**

1. Financial Operations staff are shared with the Department of Fisheries and Aquaculture.
2. A number of employees in Executive Support are shared with the Forestry and Agrifoods Agency.
3. Excludes vacant positions.

Physical Location

The main offices of the Department of Natural Resources' Mines and Energy Branches are in one location:

Natural Resources Building
50 Elizabeth Avenue
P.O. Box 8700
St. John's, NL
A1B 4J6

Website

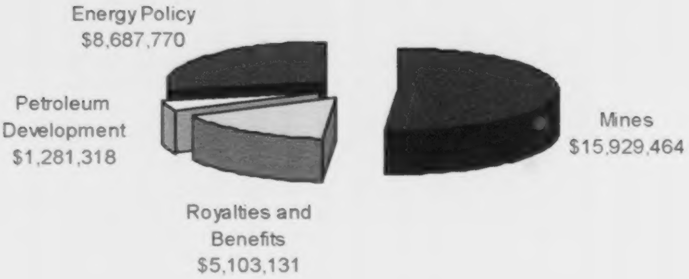
The Department of Natural Resources website is located at: http://www.gov.nl.ca/nr.

Budget

Expenditures for the Mines and Energy Branches in fiscal year 2009-10 totaled $80.4 million. This figure does not include $6.02 million related to executive and support services which was shared with the Forestry and Agrifoods Agency. The chart below

illustrates expenditures by the department's Mines Branch as well as its three Energy Branch sections. In addition to these amounts, Energy Branch expenditures included $6 million for initiatives associated with Energy Plan implementation, as well as a $40 million allocation to Nalcor Energy and its subsidiaries to facilitate participation in oil and gas activities and other energy projects. Expenditures also included a net amount of $2.89 million which the department contributes toward the operating and capital costs of the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB). Refer to Appendix II for a complete breakdown of expenditures for the year.

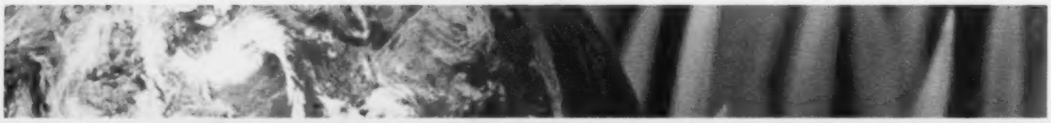
2009-10 Expenditures by Branch/Section



Lines of Business

Resource Policy

Working closely with key stakeholders, the department develops resource policy, and coordinates and facilitates sustainable development and management. Based on these frameworks, the branches directly and indirectly develop, monitor and/or initiate supporting regulatory and benefits optimization activities.



Mines and Energy Branches

Resource Management

In the onshore area of the province, the branches ensure industries follow appropriate resource management practices and comply with mines and energy regulations. The branches facilitate well-planned, responsible resource management activities and are responsible for monitoring almost all aspects of these activities. Mineral and petroleum resource management activities also include title allocation, administration and ensuring compliance with site development and rehabilitation requirements.

In the offshore area, the department discharges its operational management and administration functions for offshore petroleum activity under a federal-provincial joint regime administered by the C-NLOPB.

In the electricity resource area, involvement in resource management is indirect and implemented through the Board of Commissioners of Public Utilities and Hydro.

The department is also responsible for petroleum royalty development and administration of onshore and offshore petroleum royalties.

Resource Exploration and Assessment

This line of business includes several activities that precede resource development, including the gathering, interpretation and dissemination of geoscience data and the provision of exploration incentives. The activities of the department in this area are designed to support and encourage exploration, investment decisions, permitting and development opportunities.

Promotion and Facilitation of Resource Development

Resource development builds on exploration and resource assessment. Resource development projects generally tend to be long term and capital intensive and, as such, generate significant economic and employment benefits. These projects can be important catalysts of growth, particularly for rural areas, as well as for the development of industrial infrastructure and the province's supply and service capabilities. Activities are specifically directed to negotiating, promoting and facilitating well-planned, responsible mineral and energy development and associated business and employment opportunities.

2009-10 Year in Profile

The following section takes a focused look at major accomplishments that occurred during the 2009-10 fiscal year.

1. Hibernia Southern Extension Agreement

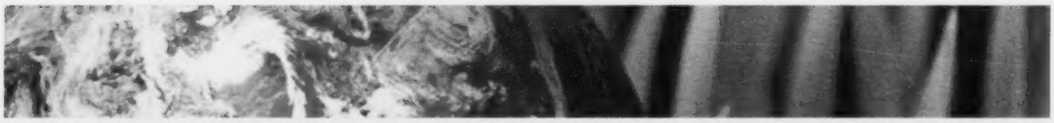
The Provincial Government delivered on its Energy Plan goal of a 10 per cent equity stake, as well as a top royalty rate of 50 per cent, with an agreement with its oil industry partners to develop the Hibernia Southern Extension. The formal development agreement was signed on February 16, 2010.

Newfoundland Labrador
Newfoundland Labrador

Signatories at official signing of Hibernia Southern Extension Agreement

Seated: Glen Scott, President, ExxonMobil Canada; the Honourable Kathy Dunderdale, Acting Premier and Minister of Natural Resources; the Honourable Tom Marshall, Minister of Finance.

Standing: Murray Todd, President and CEO, Canada Hibernia Holding Corporation; Ed Martin, President and CEO, Nalcor Energy; Alan Dunlop, Vice President, Chevron Canada; Alan Brown, Vice President, East Coast, Suncor; Hege Rogno, Vice President, Offshore Upstream, Statoil Canada; Cal Buchanan, Vice President, Joint Ventures and Business Development, Murphy Oil, and Paul Sacuta, President, Hibernia Management Development Corporation.



The Hibernia Southern Extension will increase and sustain production from the main Hibernia field, preserving employment levels while providing a significantly greater royalty return for the province than any previous project. The Hibernia South Extension is estimated to return approximately $13 billion to the Provincial Government in royalties, return on investment through Nalcor Energy – Oil and Gas, and corporate income tax. This estimate is based on an updated oil price forecast by the international energy consulting firm PIRA.

The agreement also contains a commitment to implementing a Gender Equity and Diversity Program for all phases of the project. This program will ensure full access to employment opportunities for qualified women and disadvantaged groups by creating proactive programs and practices that will contribute to an inclusive work environment and corporate culture.[1]

The Hibernia Southern Extension contains an estimated 220 million barrels of oil. The Provincial Government, through Nalcor Energy – Oil and Gas, acquired a 10 per cent equity interest in the estimated 170 million barrels that will be produced using a subsea tie-back on terms consistent with the Energy Plan. The remainder will be produced from the existing Gravity-Based Structure (GBS) at an enhanced royalty rate to the province of 42.5 per cent on every barrel of oil. Upon completion of the formal agreements, Nalcor Energy – Oil and Gas will pay an overall purchase price of $30 million. This is consistent with the Energy Plan terms of recognizing historic costs for Nalcor's entry into new license areas.

The partners in the Hibernia Southern Extension are ExxonMobil, Petro-Canada, Chevron, Murphy Oil, Canada Hibernia Holding Corporation, StatoilHydro and Nalcor Energy – Oil and Gas.

> *"The oil industry is the engine that drives our economy, representing nearly 40 per cent of the Gross Domestic Product. This particular deal with its 10 per cent equity stake and top tier royalty rate will ensure significant economic gain for all Newfoundlanders and Labradorians during the project's entire lifespan."*
>
> *Minister Dunderdale, as Acting Premier*

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[1] Information adopted from the Hibernia Southern Extension Benefits Agreement.

2. Labrador Iron Ore

Iron ore has been a focus of the mining industry in Labrador for many years and 2009-10 was no exception. The province's most advanced new iron ore projects are focused on high-grade, direct-shipping ore (DSO) deposits in northwestern Labrador. Two companies, Labrador Iron Mines Holdings Limited (LIM) and New Millennium Capital Corporation (NML) are developing separate projects on the Labrador border, near Schefferville, Quebec. In addition, work continued at Labrador's two existing iron ore operations by the Iron Ore Company of Canada (IOC) and Wabush Mines.

IOC and Wabush Mines Operations

The province's largest iron ore operation, IOC, is based in Labrador City where it has been producing iron ore from its Carol Lake operation since 1962. As Canada's largest iron ore pellet producer, IOC operates several pits, a concentrator, and a pellet plant at Carol Lake, port facilities in Sept-Iles, Quebec and a 420 kilometre rail line that links the mine and the port. Annual production capacity is 17-18 million tonnes of which approximately 13 million tonnes can be pelletized. In 2009, IOC's operations generated an estimated 1,378 person-years of employment with forecasts for 2010 indicating that employment for the year will reach 1,567 person-years.

The other iron ore producer is Wabush Mines, which commenced mining iron ore from the Scully Mine in Labrador in 1965 and currently operates a mine and concentrating plant at Wabush and a pellet plant and shipping facilities in Point Noire, Quebec. Wabush Mines has a capacity of 5.5 million tonnes per year. In 2009, Wabush Mines' operations generated an estimated 361 person years of employment with forecasts for 2010 indicating that employment for the year will reach 369 person-years.

IOC Iron Ore Open Pit

The combined value of iron ore shipments from these was an estimated $1.2 billion in 2009 and is forecasted to be approximately $1.6 billion in 2010. Increasing iron ore demand and ongoing mine expansions should result in further increases in overall employment and shipments at these iron ore operations in Labrador West during 2011.

James and Redmond Direct Shipping Iron Ore Project[2]

LIM estimates that it can produce up to five million tonnes of iron ore per year from this project after year three. The project is expected to employ approximately 40 people during construction and approximately 109 people during the operations phase. LIM has committed to achieving a minimum of 78 percent of construction phase and 78 percent of operations phase employment accruing to residents of Newfoundland and Labrador.

Operating costs for the project will amount to between $30 million and $60 million per year. LIM has committed to achieving a minimum of 85 per cent of total value of construction and 85 percent of total value of operations phase contracts and goods and services being awarded and procured through companies and suppliers based in the province, with some exceptions.

First Iron Ore Bulk Sample being transported from the Schefferville Project

Photo: LIM

LIM has committed to work closely with the Innu of Labrador, involving them in the provision of labour as well as goods and services, and to maximize the use of qualified mining contractors and other services based elsewhere in the region, such as Labrador City, Wabush and Happy Valley-Goose Bay. LIM has also committed to the creation and implementation of employment equity practices to promote recruitment, training and advancement of qualified visible minorities and women. These commitments have been formalized in a Newfoundland and Labrador Benefits Plan, an Impact and Benefits Agreement signed with the Innu of Labrador, and a Women's Employment Plan.

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[2] Information adopted from the Shefferville Area Iron Ore Mine Environmental Impact Statement (August 2009) available online at: http://www.env.gov.nl.ca/env/env_assessment/projects/Y2010/1379/.

Elross Lake Direct Shipping Iron Ore Project[3]

NML, along with partner Tata Steel of India, hopes to be in production by 2011. In its Environmental Impact Statement, currently under assessment, NML put forward its plans to maximize benefits from the project for the province of Newfoundland and Labrador. The company estimates that construction activity in Labrador will result in approximately 255 person-years of employment over two years, with approximately 85 percent of the work being performed by residents of Newfoundland and Labrador. During operations, NML estimates that there will be over 200 jobs created with an estimated 75 – 80 per cent to be filled by residents of the province.

NML estimates that the cost of building mining facilities and works in Labrador for the project will amount to approximately $225 million. The operating cost, including labour, for Labrador mining facilities and works is estimated at $43 million.

Future Iron Ore Prospects

In addition to these existing projects, a healthy level of exploration activity continues for iron ore in Labrador. Altius Minerals Corporation has partnered with Alderon Resources Corporation to form a public company focused on the western Labrador iron ore mining district. A substantial drilling program, with a budget of $7 million, is anticipated to commence in 2010. The program will provide sufficient data to enable a resource estimate of the iron zones explored by Altius in its recent drilling program at its Kamistiatusset project. Altius also has other iron ore properties in the area. In addition, Champion Minerals Incorporated is exploring the Attikamagen iron ore property in northwestern Labrador in an option agreement with Labec Century Iron Ore Incorporated. In February 2010, Champion released the findings of its 2008 exploration activity in the area with encouraging results.

During the year, the department initiated activities related to the assessment of potential market value of the Julienne Lake iron ore deposit in Western Labrador. As Phase One of this initiative, a consultant was commissioned in late 2009 to review available historical material on the Julienne Lake deposit. The consultant's report was submitted in February 2010 and included recommendations for work to be included in Phase Two of the project, which will focus on further exploration and resource assessment of the deposit. Phase Two was approved as part of the 2010-11 budget at a value of $2.1 million.

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[3] Information adopted from the Elross Lake Area Iron Ore Mine Environmental Impact Statement (December 2009) available online at: http://www.env.gov.nl.ca/env/env_assessment/projects/Y2010/1380/index.html.

P&H
97
2800XPB

IOC Truck and Shovel

3. Continued Commitment to Gender Equity and Diversity

In addition to unprecedented royalty returns, the signing of the Hibernia Southern Extension Agreement further demonstrated government's unwavering commitment to gender equity and diversity. As communicated in the province's Energy Plan, "an available and diverse workforce is critical to the success of our energy projects and the growth of the provincial energy economy." Large scale resource projects present a significant opportunity to improve the employment and overall economic status of women and other underrepresented groups in the province. In taking advantage of this opportunity, the Provincial Government has required Women's Employment and Diversity Plans pertaining to the Hebron project and, more recently, the Hibernia Southern Extension project. These plans require proponents to identify corporate objectives that will be implemented to achieve improved employment equity across all project phases.

In particular, the gender and diversity requirements include:

- A commitment to proactive programs and practices that contribute to the creation of an inclusive work environment and corporate culture;
- The promotion of accountability and responsibility for diversity;
- Quantifiable objectives and goals that will result in increased employment of women and other underrepresented groups;
- Business access strategies to allow greater participation in the procurement and supply opportunities associated with these projects;
- The creation of training and recruitment programs;
- The provision of project facilities that are accommodative in terms of living conditions and a safe and respectful work environment;
- Longer-term quantitative goals for employment in occupational areas where historical under-representation has occurred; and
- Implementation, monitoring and reporting processes to support the achievement of commitments identified in Women's Employment and Diversity Plans.

Government strongly believes that these negotiated components will support full access to employment opportunities for qualified women and other underrepresented groups by requiring proactive programs and practices that will contribute to inclusive work environments and corporate cultures. Through the Hibernia Southern Extension agreement, the Provincial Government has demonstrated that these expectations are now a standard requirement in the development of resource projects. Considerations are currently underway regarding the Benefits Strategy for the development of the Lower Churchill Project.

4. Onshore Petroleum Exploration and Industry Development

The Provincial Government is committed to encouraging exploration and development of the province's onshore petroleum resources. In 2009-10, a number of measures were taken to advance the untapped potential of onshore oil and gas in Western Newfoundland.

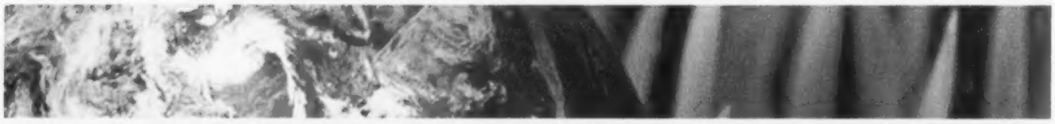
In August 2009, Nalcor Energy announced that it had acquired an average 67 per cent working interest in three onshore exploration permits in Western Newfoundland covering 103,000 acres in the Parson's Pond area. The mapped prospects for these licenses represent one of the best exploration opportunities in Western Newfoundland in terms of both an economic potential and lowest geological risk. Nalcor Energy, with its joint venture partners, is undertaking a three-well, $20 million drilling program and drilling operations commenced in February 2010. Nalcor's partners in this project include Leprechaun Resources Limited, Deer Lake Oil and Gas Incorporated, Investcan Energy Corporation and Vulcan Minerals Incorporated.

Drilling at Parson's Pond

Photo: Nalcor Energy

> *"This program will provide critical drilling information to increase interest in west coast onshore exploration."*
>
> *Minister Dunderdale*

New geoscience data pertaining to the west coast of Newfoundland was made available by the Department of Natural Resources in 2009-10. The data was gathered through two aeromagnetic surveys conducted in 2008-09. The surveys were a joint venture amongst Nalcor, through its Petroleum Exploration Enhancement Program (PEEP), and the department's Geological Survey and Petroleum Geoscience divisions. Survey results were made available online by the Geological Survey Division and include maps, databases, GIS layers, airborne survey profile data and interpolated grids. These results are essential tools that can be used to geologically identify key areas of interest for potential petroleum and mineral exploration.



Mines and Energy Branches

As government works toward expanding geoscience knowledge of Western Newfoundland and encouraging exploration activity, it is also working with industry to help develop local supply and service capabilities. In January 2010, the Provincial Government released a report outlining how the community, industry and government can support the development and growth of an oil and gas sector on the west coast. The report, *Infrastructure and Supply and Service Requirements and Opportunities for Oil and Gas Industry: Western Newfoundland*, is the result of a partnership between the Department of Natural Resources and the Greater Corner Brook Board of Trade. It contains nine broad recommendations to assist the region in supporting future potential development in the short to longer term. The report and recommendations will assist in long-term planning and decision-making and will help local companies identify potential opportunities for their role in industry development.

Outcomes of Objectives

This section of the Annual Performance Report details the significant work undertaken and completed by the department on its objectives for 2009-10.

Issue 1: Identification and Promotion of Resource Development Opportunities

There are two keys to unlocking our province's resource development potential. First, it is important to increase the knowledge base of geoscience data to identify opportunities for resource development. Secondly we must effectively market these opportunities to the world to ensure that the province's resources are developed to benefit the people of Newfoundland and Labrador. In support of these priorities, the department engaged in several activities throughout the year related to the generation and distribution of high quality resource information.

Goal:

By March 31, 2011, the Mines and Energy Branches will have enhanced our knowledge base of geo-science data to identify opportunities for resource development and will have improved promotion of these opportunities.

2009-10 Objective:

By March 31, 2010, the Mines and Energy Branches will have continued the expanded collection of geo-science data and implemented promotional plans.

Measure: Continued the expanded collection of data and implemented promotional plans

Progress 2009-10

1. Supported additional onshore and offshore geoscience data collection

In 2009-10, the C-NLOPB and the department's Energy Branch continued to explore options for the management and storage of onshore petroleum geoscience data. In this vein, the department obtained a dedicated server to house an onshore data repository. The department has begun to load data already in its possession and initiated a project to locate and acquire existing onshore geoscience data from other sources such as petroleum exploration and development companies.

In addition, during 2009-10, the department's Energy Branch acquired specialized software for the interpretation of onshore and offshore petroleum geoscience data. This new software, used by petroleum exploration and development companies, will enable department scientists to collect geoscience data in its native format from industry participants and use enhanced data analysis techniques.

2. Continued funding for Nalcor for additional onshore and offshore geoscience studies

Onshore

PEEP is a program delivered by Nalcor and funded by the Provincial Government. The program focuses on the enhancement of onshore petroleum geoscience data in the province. In 2008-09, a geoscience study, in the form of a high resolution aeromagnetic survey, of Western Newfoundland was conducted and funded, in part, through PEEP[4]. The funding for this survey initiative extended into 2009-10 as survey results were processed and geoscience data made available to the public (refer to indicator 7 below).

In June 2009, a Memorial University of Newfoundland Sweep Impact Seismic Technique (MUNSIST) seismic source test was also completed through PEEP. MUNSIST is a research program of Memorial's Department of Earth Sciences. The MUNSIST "source" consists of a hydraulic rock breaker deployed from the arm of a back-hoe or excavator. This experimental tool allows for off-road capability and the potential benefits of this technology to Western Newfoundland explorers is the provision of a cheap, portable,

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[4] The full aeromagnetic survey conducted in 2008-09 was a joint venture of Nalcor Energy (through PEEP), and Department of Natural Resources Geological Survey and Petroleum Geoscience divisions.

and environmentally friendly alternative to traditional sources (dynamite and Vibroseis). In the first production-level field trial, seismic data was collected roughly five kilometres north of the Parson's Pond region in the Five Mile Road area. Geoscience data resulting from the program was submitted to the department and is available upon request. Another MUNSIST survey is planned for the summer of 2010.

During the year, the department, along with Nalcor, commenced consultations with industry on opportunities for further onshore petroleum geoscience research under PEEP. Proposals for new studies are expected to be received during 2010-11.

Offshore

In 2009-10, the department also worked with Nalcor towards the establishment of a funding program for offshore petroleum geoscience studies. A Memorandum of Understanding was completed between the department and Nalcor that outlines the objectives of the Offshore Geoscience Data Program (OGDP) and $5 million was transferred to the fund. A Plate Reconstruction Project in collaboration with the Irish Petroleum Infrastructure Program under the North Atlantic Petroleum Systems Assessment Group (NAPSA) is being funded under the OGDP. A request for proposals has been issued and bids are being addressed.

3. Promoted key findings from geoscience information collected through initiatives completed in 2008-09

During 2009-10, results of a 2008-09 aeromagnetic survey of western Newfoundland, including survey profile data, interpolated grids and full colour maps, were made publicly available online (refer to indicator 7 below). In addition, the department's Energy Branch developed a variety of promotional materials to specifically highlight the results of the survey and the results were promoted at a number of local, national and international oil and gas conferences and exhibitions throughout the year.

Results of 2008-09 geoscience field programs undertaken by the department's Mines Branch were also made public through the publication of the Current Research volume, several open files and maps and numerous presentations at scientific and industry meetings. The results were also made available through the many promotional initiatives undertaken by the Mines Branch during the year (refer to indicator 11).

4. Supported expanded field programs and on-line posting of information

The department's Mines Branch conducted the largest field program in over 10 years during the summer of 2009 with more than $2 million allocated to field activities. In Labrador the program included two bedrock-mapping projects in the Crossroads Lake and Seal Lake areas, a detailed lake-sediment geochemistry study in Western Labrador, and the final year of field work for a study of uranium mineralization in the Central Mineral Belt. In Newfoundland, the program included six full-scale mapping projects (in Western Newfoundland, northeast Newfoundland, the White Bay area, the Buchans area, the Gander area, and the Bonavista Peninsula), mineral deposit studies of copper on the Bonavista Peninsula and gold in central Newfoundland, a paleontology project in the Port au Port area, and a regional geochemistry survey in central Newfoundland.

Geological Survey Field Mapping, Labrador

The department's Energy Branch also conducted field programs during summer 2009. These programs, managed by Memorial University and funded through PEEP, focused on the west coast of Newfoundland. Interpretation of the data commenced during 2009-10 and initial findings were presented at the technical conference of the Geological Association of Canada – Newfoundland Section in February 2010.

The department operates an online resource atlas, *Geoscience Online*, to publish large volumes of geoscience data for the province on the Internet. *Geoscience Online* is one of the top online geoscience resources in Canada as a result of continuous improvements and new data postings. Some of the improvements incorporated in 2009-10 include:

- Improved documentation for many geoscience layers. “Layers” is a GIS term referring to sets of data that can be accessed individually or superimposed on a computer screen, usually with some sort of map. When they are superimposed more information can be obtained by combining the two or more layers.
- Improved functionality for turning on layers and sub-layers – more data sets can now be accessed individually.

- Addition of updated datasets including an increase in the number of described mineral occurrences; new datasets for glacial till, lake sediment and water geochemistry; and archival geochemical data for volcanic rocks in Newfoundland and Labrador.

New geoscience information was posted on *Geoscience Online* throughout the year. Highlights include the results from all 2009 Mines Branch field projects, a commodity report on uranium in the province, and aeromagnetic survey results for Western Newfoundland.

5. Developed agreement with Natural Resources Canada for cost-shared geoscience work in Western Labrador

A draft agreement with Natural Resources Canada, governing cooperative geoscience research related to mineral exploration in Western Labrador, was completed in early 2009 and is awaiting final approval by federal partners. The research, however, has gone ahead with federal components now complete and provincial components to be finished in 2010-11.

6. Continued review of offshore seismic data for gaps

A Geophysical Gap Analysis for offshore Newfoundland and Labrador was presented to the department by the C-NLOPB in 2008-09. Review of this gap analysis was ongoing during 2009-10 and helped inform discussions on the establishment of an offshore geoscience funding program in partnership with Nalcor (refer to indicator 2 above).

7. Onshore aeromag survey processed and available online

As stated above, the results of a high-resolution aeromagnetic survey of Western Newfoundland conducted in 2008-09 were processed and made available online during 2009-10. This was achieved in two phases. In July 2009, the Mines Branch posted results from the portion of the survey that it funded and in November, the Energy Branch posted the remaining results from the portion funded through PEEP and the Petroleum Geoscience Division.

Both sets of results were made available online by the Geological Survey Division through Geoscience Online and included maps, databases, GIS layers, airborne survey

profile data and interpolated grids. These results are essential tools used to geologically identify key areas of interest for potential mineral and petroleum exploration. The results can be found on the department's web site as well as on *Geoscience Online* at http://gis.geosurv.gov.nl.ca.

A CD-ROM version of the maps is also available from the Geological Survey Division upon request.

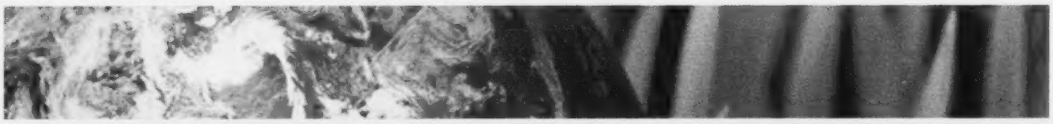
> *"It is important for us to build upon our geoscientific knowledge to attract industry interest and identify prospective areas for future exploration. These maps will play a vital role in further advancing the mining and petroleum sectors, and will help to guarantee our province's continued success."*
>
> *Minister Dunderdale*

8. In partnership with the Federal Government, supported enhanced geoscience databases for Labrador

The Geological Survey of Canada completed a major geophysical survey in Western Labrador with the results released in March 2010. During the year, the department's Geological Survey Division completed three major field programs in the same area. The information gathered through the survey and field programs were successful in enhancing geoscience databases for Labrador.

9. Finalized the Petroleum Resource Marketing Plan and commenced implementing recommendations

During 2009-10, the Petroleum Resource Marketing Plan was finalized and recommendations assessed to identify priority areas for implementation. During the year, the department began the implementation of a number of plan initiatives. These initiatives included the preparation and distribution of promotional materials regarding the petroleum resource potential of the province, both onshore and offshore. These and other materials were made available to industry participants through attendance at national and international conferences and events as outlined in the plan.



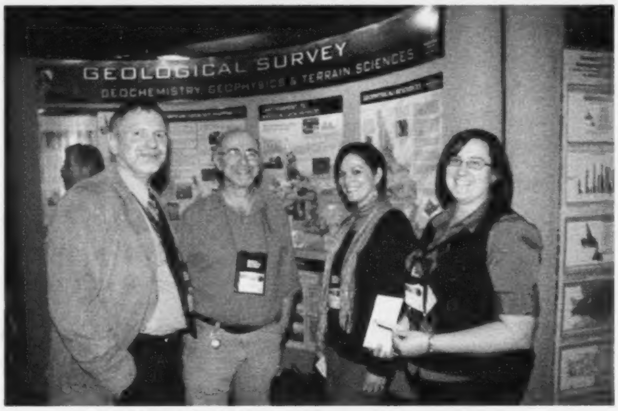
10. Completion of the Mineral Exploration Approval Management System (MEAMS)

Once operational, MEAMS will be the single online application portal for the majority of permits required for exploration and will enable faster processing of these permits and associated approvals.

During 2009-10, development and testing was completed on the portion of the application that will enable online client use. The administrative / maintenance portion of the application to be used by department staff is currently under development. The application was not fully completed during the year as development and testing work required more time than expected. The development team also encountered delays due to challenges in accessing technical and digital information not under the department's control. The full MEAMS application is expected to go live in October 2010.

11. Furthered implementation of the Mineral Promotions Plan

Throughout 2009-10, the department's Mines Branch proceeded to implement a number of initiatives identified in the Minerals Promotion Plan. Highlights for the year included increased exposure to Asian markets through participation in the China Mining Conference and Expo in Beijing, the China Mining Association Meeting in Toronto and the China Government–Industry Mission in Montreal. The Branch also coordinated trade show booths and exhibits at the Mineral Exploration Roundup, Québec Exploration and the Prospectors and Developers Association of Canada (PDAC), as well as local venues such as the Baie Verte Mining Conference and the Labrador Expo. Work continued throughout the year on further expansion and integration of public and private sector elements of the Mineral Resources Review, the annual provincial mining conference and trade show which is the largest event of its kind in Atlantic Canada.



Mines Branch staff at *Mineral Resources Review*

During 2009-10, the Mines Branch also developed a variety of industry information

packages and special publications on the provincial mineral exploration sector. The most notable of these was a special supplement in *The Mining Journal*. Staff also made presentations on the mining sector, including exploration activity, to community councils and regional Economic Zone boards province-wide. Staff also continued the usual participation in career fairs and public service initiatives.

Objectives, Measures and Indicators – 2010-11

Objective:

By March 31, 2011, the Mines and Energy Branches will have improved access to enhanced information on resource development opportunities.

Measure: Improved access to enhanced information

Indicators:

- Enhanced the Geoscience Online application to improve access to geoscience information
- Released geoscience data acquired over the last two years
- Increased access to the department's geoscience information and the province's resource opportunities through continued marketing and promotional efforts including:
    - Continued implementation of the Minerals Promotional Plan
    - Continued implementation of the Petroleum Resource Marketing Plan including attendance at recommended international geoscience conferences and exhibitions, advertising campaigns and business development initiatives
    - Creation and publication of petroleum resource development promotional material including resource opportunity brochures, basin overview summaries and a comprehensive resource promotional CD.

Issue 2: Improved Efficiency and Effectiveness of Regulatory Systems

Quality regulatory systems encourage responsible, timely and effective resource development and help make the province competitive with national and international jurisdictions, while ensuring that our fiscal regimes reflect the increasing value of our natural resources. Throughout 2009-10, significant progress was made toward the improvement of legislation, regulations, policy and other resource management practices. Of particular note was the promulgation of new goal-based offshore drilling and production regulations for the offshore in December 2009.

Goal:

By March 31, 2011, the Mines and Energy Branches will have improved regulatory systems to enhance the competitiveness of the mines and energy sectors.

2009-10 Objective:

By March 31, 2010, the Mines and Energy Branches will have improved regulatory systems in priority areas.

Measure: Improved regulatory systems

Progress 2009-10

1. **Improved regulatory systems through further work in the following priority areas:**

Natural Gas Royalty Regime

The Natural Gas Royalty Regulations were drafted during the year. It is anticipated that these regulations will be promulgated in the 2010-11 timeframe. These regulations will improve the province's regulatory environment for prospective proponents of offshore natural gas developments who will have a clear understanding of the royalties they will be expected to pay the province. This knowledge will contribute to a greater certainty for proponents when assessing project economics and, by reducing unknowns, will reduce the risk associated with project development.

Offshore Petroleum Drilling Regulations

Through its partnership in the Frontier and Offshore Regulatory Renewal Initiative (FORRI) the province is moving forward with a transition from prescriptive to goal-oriented regulation through a phased renewal of offshore petroleum regulations.

Goal-oriented regulation is a hybrid approach that includes prescriptive and goal or performance-based elements. Prescriptive regulation dictates the means by which compliance is achieved, whereas goal or performance-based regulation sets objectives to be achieved and allows companies to identify the means to achieve them. Goal-oriented regulation places a greater onus on the operator for meeting these goals while providing flexibility to industry for the adoption of the newest technologies and best practices.
On December 31, 2009, *Offshore Petroleum Drilling and Production Newfoundland and Labrador Regulations, 2009* and consequential amendments to the *Offshore Petroleum Installations Newfoundland and Labrador Regulations* and the *Offshore Certificate of Fitness Newfoundland and Labrador Regulations* were promulgated. The new drilling and production regulations replaced previously existing, prescriptive regulations, the *Offshore Area Petroleum Production and Conservation Newfoundland and Labrador Regulations* and the *Offshore Petroleum Drilling Newfoundland and Labrador Regulations*. In addition to adopting a goal-oriented approach, the new regulations resulted in improved regulatory efficiency and clarity and allow for more efficient and effective regulatory administration.

Drill Rig *Henry Goodrich*

Photo: Provincial Air

Onshore Petroleum Drilling Regulations

Drill Crew, Parsons Pond

Photo: Nalcor Energy

In addition to the promulgation of the new offshore regulations, work progressed during the year towards the development of proposed new onshore drilling, production and conservation regulations. This change will introduce regulation regarding production and resource conservation which does not currently exist in onshore regulations, providing a process that will allow production to proceed during the transition from discovery to full development. In addition, it will introduce a goal-based model for onshore drilling, production and conservation. Finally, this change will result in improved regulatory efficiency. In 2009-10, intergovernmental consultations were conducted on the proposed draft regulations, comments were received and a response to the comments commenced. It is estimated that these proposed regulations will be promulgated in the 2011-2012 timeframe.

Modernization of the Offshore Royalty Regime

The Generic Offshore Oil Royalty Regime will be based on the Natural Gas Royalty Regulations currently under development.

Occupational Health and Safety Changes to Regulations

In February 2010, a draft of a new federal Bill on occupational health and safety in the offshore was forwarded to the FORRI working group, of which the Department of Natural Resources is a member. The working group met on the Bill and a substantive portion has been approved as representative of the policy principles. Plans are to conduct stakeholder consultations in April 2010 with introduction of the proposed amendments into the respective jurisdictions' legislatures (Newfoundland and Labrador, Nova Scotia, and the federal government) for approval in the fall of 2010.

2. Completion of regulatory gap analysis to determine priority areas for new regulation

The *Framework Regulations – Gap Analysis and Identification* was completed and is under review. The department is working towards a first draft of the offshore Framework Regulations targeted for August 2010. These regulations will house all the current offshore operational regulations into a single, goal-oriented regulatory regime.

3. Initiated review of electricity regulation

This review was not initiated in 2009-10 due to delays encountered in securing the necessary human resources. This review will begin early in 2010-11.

Objectives, Measures and Indicators – 2010-11

Objective:

By March 31, 2011, the Mines and Energy Branches will have enhanced the competitiveness of the mines and energy sectors and continued to identify opportunities for further enhancements to regulatory systems.

Measure: Enhanced competitiveness and continued identification of opportunities for further enhancement

Indicators:

- Improved regulatory systems for the oil and gas sector through further work on:
    - Natural Gas Royalty Regulations
    - Onshore Petroleum Drilling, Production and Conservation Regulations
    - Offshore Framework Regulations
    - Changes to regulations related to offshore occupational health and safety
- Initiated review of electricity regulation
- Identified opportunities for enhancement to the regulatory systems for the mining industry through continued work on the Minerals Strategy
- Implemented the Mineral Exploration Approval Management System (MEAMS)

Issue 3: Sustainable Economic Benefits

The benefits from resource development are not limited to direct revenues. Increased activity in our mines and energy sectors also means increased direct and indirect employment and expenditures. Work is continuing to ensure that project negotiations include significant local benefits, including employment and the provision of supplies and services.

Goal:

By March 31, 2011, the Mines and Energy Branches will have supported an increase in the province's capacity to ensure long-term economic sustainability of the mines and energy sectors.

2009-10 Objective:

By March 31, 2010, the Mines and Energy Branches will have implemented priority initiatives in response to opportunities identified through preliminary studies.

Measure: Implemented priority initiatives

Progress 2009-10

1. **Completed further consultations with industry to determine government's role in marketing the supply and service industries**

Meetings were held with several companies to discuss approach, along with informal discussions with the Newfoundland and Labrador Oil and Gas Industries Association (NOIA). The intent is to hire a consultant in 2010-11 to develop a strategy for surveying and engaging supply and service industry participants.

Throughout the year, the department provided support for the exploration of international opportunities for the supply and service sector. Support was provided to NOIA in its efforts to identify opportunities for the sector in Greenland. Department staff participated in meetings with Greenland companies visiting the province and participated in committees tasked with completing further investigation and assessment of opportunities. The linkages between Newfoundland and Labrador's expertise operating in harsh offshore environments and the potential opportunities this creates for partnerships were also explored during an official visit to the Murmansk region of Russia in October by the Honourable Kathy Dunderdale, Deputy Premier and Minister of Natural Resources. The visit coincided with, and provided support to, a Canadian arctic technologies trade mission to Russia organized by the Department of Foreign Affairs. Participants from this province included Memorial University, Marine Institute, Rutter Technologies, Altamar Atlantic Limited, Oceanic Limited and NOIA.

> *"The physical environment and extreme weather conditions for petroleum development in Russia, particularly in the Barents Sea, closely resemble our own ice-prone offshore environment and provide significant opportunities for our research institutions and for sharing information on our supply and service capabilities."*
>
> ***Minister Dunderdale***

The department also initiated interaction between Petrobas, a major Brazilian company expanding to Atlantic Canada, and NOIA. A Petrobas representative attended a NOIA luncheon as speaker and meetings were arranged through NOIA with Petrobas and several local supply and service companies.

As part of a separate initiative, government released a report in January 2010 outlining how the community, industry and government can support the development and growth of an oil and gas sector on the west coast. The report, *Infrastructure and Supply and Service Requirements and Opportunities for Oil and Gas Industry: Western Newfoundland*, was the result of a partnership between the Department of Natural Resources and the Greater Corner Brook Board of Trade. It contains nine broad recommendations, to assist the region in supporting future potential development in the short to longer term. The report and recommendations will assist in long-term planning and decision-making. It will also assist local companies in identifying potential opportunities and their role in industry development.

2. Worked with Research Development Corporation to support the growth of research and development related to the resource sector

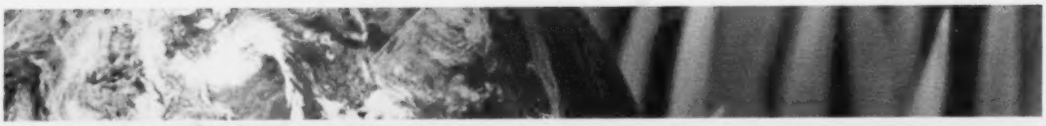
The department worked with the Research Development Corporation (RDC) as members of a steering committee responsible for guiding the work of Phase One of the Energy Innovation Roadmap. Other steering committee members included the Department of Innovation, Trade and Rural Development, the Department of Business and Nalcor Energy. Steering committee members are collaborating on the project to draw upon available expertise and experience and to keep all work informed and satisfactorily aligned with government's overall research and development (R & D) objectives for resource development. The steering committee is guiding the work, along with input from stakeholders and consultants, to determine where and how innovation can be utilized to sustain and enhance energy sector development and opportunities in the province. R & D is a critical component of innovation and the project will help to identify R & D opportunities in concert with any other ongoing work by industry stakeholders.

3. Enhanced audit and benefits monitoring processes

The department began to assess the benefits requirements in new benefits agreements reached with the proponents of major resource development projects, such as Hebron. Benefits agreements have traditionally required companies to implement strategies that maximize overall employment levels and project expenditures in the province. Under these new benefits agreements, companies are also required to develop and implement Women's Employment Plans and Diversity Plans to enhance the employment opportunities for women and other underrepresented groups resulting from these projects. In 2009-10, the department reviewed these additional expectations in the new agreements and began to formulate a corresponding reporting and monitoring framework. This framework represents an enhancement over previously existing benefits monitoring processes as it will enable the department to assess benefits on a new level and work with companies to ensure they continually advance their efforts in the employment of women and diverse populations.

Underground Mines
Teck Duck Pond Operations

Photo: Teck



The department also took steps to enhance the capacity of the Royalties Administration and Monitoring Division. Staffing activities resulted in a full audit staff complement by July 31 and an assessment of the organizational structure was completed. The purpose of the assessment was to determine staffing needs on a go-forward basis and resulted in budget proposals being submitted for re-allocation of salary to increase the number of audit staff in the department. Further assessment is planned for the 2010-11 year when the Hibernia Southern Extension agreement has been fully analyzed for its resource demands. These actions are important to ensure that the department can effectively monitor the royalties submitted by each project partner for each of the province's offshore oil projects. This is a complex task and will increase in complexity as new projects come on stream and new agreements are reached.

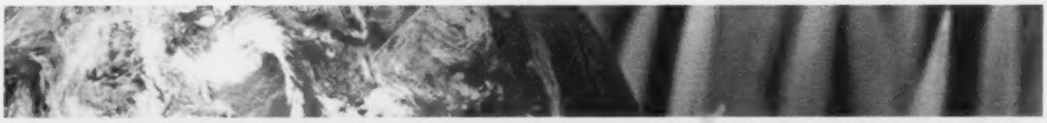
4. Enhanced energy supply and demand, and energy economics modeling to inform negotiation processes

Throughout the year, the department's Energy Economics Division made improvements to the econometric model of provincial energy demand and supply that it uses and to the detailed information system that supports it. These improvements were achieved through ongoing research and consultation with Statistics Canada, Natural Resources Canada, provincial utilities and other provincial and federal government departments and organizations. Further enhancements to this model will evolve over time through continued research and consultation.

In addition, the Energy Economics Division developed and utilized enhanced economics modeling tools in order to provide the economic modeling and analysis required to support the department's Hibernia Southern Extension negotiation team. These tools enabled the team to perform accurate assessments of the highly complex fiscal proposals brought forward by the Hibernia project owners.

5. Completed/supported further studies on value-added potential (with Nalcor)

During 2009-10, the department held discussions with Nalcor regarding strategies for gas development and related studies on the potential for value-added processing opportunities in the province's energy sector. It was determined that given the impacts of the global economic recession, coupled with a weak gas price projection over the short to mid term, that components of the study work be delayed at this time. Nalcor continued to assess opportunities for commercial development of offshore gas resources.



6. Supported development of a Supply and Service database

During the initial stages of this initiative, it was agreed by the department and its stakeholders that the development of this database would be best led by the supply and service industry itself with NOIA taking the lead role. The department committed to supporting NOIA in the development through funding, consultation and oversight.

During the year, a consultant was commissioned by the department to conduct a study to support the development of the database. The study included recommendations to NOIA on the approach that should be taken to develop the database system. An Expression of Interest (EOI) for system development issued by NOIA during the year was unsuccessful, however, NOIA's intent is to modify and re-issue the EOI. The department will provide financial support to NOIA to assist with the cost of developing the database.

7. Increased investment in Mineral Incentive Program to promote mineral exploration and ensure maintenance of prospecting activity

As part of Budget 2009-10, an additional $500,000 was allocated to the Mineral Incentive Program (MIP) bringing it to a total of $3 million. This was a response to the economic downturn starting in late 2008 and the reduction of corporate exploration expenditures. The MIP provides funding for mineral exploration activities through the Junior Exploration Assistance Program, the Natural Stone Assessment Program and through the provision of grants and training for prospectors.

The table below compares MIP spending by program for 2008-09 and 2009-10.

Program	2008-09	2009-10
Prospector Assistance (number)	54	75
Prospector Assistance (grants)	$192,000	$400,000
Natural Stone (number)	2	1
Natural Stone (grants)	$100,000	$50,000
Junior Exploration (number)	21	23
Junior Exploration (grants)	$2,100,000	$2,400,000
Prospecting Schools (number)	2	1
Total	**$2,392,000**	**$2,850,000**

8. Initiated work on the development of a mineral policy for the province

During 2009-10, the department completed preliminary work towards the development of a new Minerals Strategy for the province. The Minerals Strategy will be a policy document that will focus on the expansion of exploration and production activity and the creation of additional employment opportunities. The Strategy will also ensure environmental protection and the sustainable development of the province's mineral resources. In early 2010, the 2010-11 budget included $235,000 for completion of the strategy.

The department's Mines Branch will oversee the development of the strategy and in early 2010 human resource changes were made to put staff in place to perform the work. The strategy development process will include an examination of existing mineral legislation and an analysis of the department's capacity to meet the growing demand forecasted in the sector. The strategy will assess the potential of the mineral industry throughout the province, including a close look at the opportunities and existing supporting infrastructure in Labrador.

A discussion paper for the Minerals Strategy will be released in the fall of 2010, prior to public and stakeholder consultations. Consultations are scheduled for late 2010, leading into the development of the strategy document, to be released in mid-2011.

9. Furthered benefits discussions for two new iron ore projects in northwestern Labrador

During 2009-10 the two iron ore projects proposed by LIM and NML were in varying stages of development.

LIM was released from Environmental Assessment in February 2010. A Newfoundland and Labrador Benefits Plan, inclusive of a Women's Employment Plan, was developed as part of the Environmental Assessment process. The plan outlines the company's commitments to the province respecting employment, training, the provision of goods and services, among other matters, and also includes a monitoring program. The company is bound by all commitments made to the province through the Newfoundland and Labrador Benefits Plan. The project is currently entering the construction phase.

The project by NML is currently within Environmental Assessment. A Newfoundland and Labrador Benefits Plan has been submitted by the company. As with the LIM plan, this

plan outlines the company's commitments to the province respecting employment, training, the provision of goods and services, among other matters, and also includes a monitoring program. A Women's Employment Plan is also being developed. The department is currently working with the company on the finalization of Newfoundland and Labrador benefits associated with the project prior to the construction phase.

10. Continued negotiations to provide for construction of the Bloom Lake Railway and provision of associated benefits for completion in mid-2009

Negotiations continued into 2009-10 and final construction of the Bloom Lake Railway is nearing completion and the railway is transitioning into the operations phase. Newfoundland and Labrador benefits associated with the project were examined and finalized through the environmental assessment process. Benefits monitoring is now ongoing.

Mines and Energy Branches

Objectives, Measures and Indicators – 2010-11

Objective:

By March 31, 2011, the Mines and Energy Branches will have implemented additional initiatives designed to increase the capacity of the province to ensure long-term economic sustainability of the sectors.

Measure: implemented additional initiatives

Indicators:

- Acquired and promoted new geoscience data to support exploration activities
- Commenced additional initiatives to assess the labour and industrial capacities of the province to maximize participation in large-scale resource development projects
- Initiated work on the development of a new Petroleum Royalties Administration Monitoring System (PRAMS) to enhance the department's capacity to effectively monitor the increasingly complex royalty agreements in place with industry partners
- Worked with Nalcor on development of the Lower Churchill Benefits Strategy
- Implemented activities related to Phase Two of the assessment of potential market value of the Julienne Lake iron ore deposit in Western Labrador
- Identified barriers to further offshore and onshore oil and gas exploration through participation in the Offshore Continental Margin Working Group and the Western Newfoundland Region Working Group
- Implemented next phase of the province's Minerals Strategy initiative

Issue 4: Sustainable Resource Development

An important element of the province's approach to natural resource development is sustainability. It is essential that we take measures to ensure the efficient utilization of our resources, particularly those that are non-renewable. It is important to incorporate principles of environmental sustainability as we explore, develop and process our energy and mineral resources.

Goal:

By March 31, 2011, the Mines and Energy Branches will have made significant advances in support of the sustainable development of natural resources in the province.

2009-10 Objective:

By March 31, 2010, the Mines and Energy Branches will have commenced implementing enhanced programs or policies to improve sustainable resource development.

Measure: Commenced implementing

Progress 2009-10

1. Completed Phase 1 of the Energy Innovation Roadmap and initiated action in priority areas.

In May 2009, the department issued a Request for Proposals for a consultant to assist with Phase One – Priorities Identification – of the Energy Innovation Roadmap. After the contract was awarded in August 2009 project work commenced and continued into early 2010. The work included stakeholder consultations in November 2009 and January 2010. The final Phase One report was originally expected to be completed by the end of the year, however, in September 2009, a decision was made to expand project scope and to include additional stakeholder consultations. This decision extended the project schedule for Phase One.

In 2010-11, report findings will be reviewed and decisions made regarding how to proceed with Phase Two - Roadmapping. Phase Two is expected to commence in 2010-11, including work on priority areas.

The Energy Innovation Roadmap was a commitment under the province's Energy Plan and its purpose is to provide direction, focus and priorities for our future energy technologies. The Provincial Government views the Energy Innovation Roadmap as an important step in the process of identifying energy sector challenges and establishing a vision for innovation opportunities. The roadmap will be a source of information and a strategic planning tool for future investments in innovative energy technologies.

2. Completed additional remediation work at Baie Verte, Buchans and Whalesback mines

Remediation work continued during 2009-10 at the Baie Verte and Rambler mine sites. By year-end, the work was approximately 95 per cent complete with almost 70 per cent of the overall work being conducted during this fiscal year. Some air quality monitoring and installation of fencing along Route 410 adjacent to Baie Verte Mines is all that remains. The fencing was delayed while awaiting the results of a slope stability assessment of the Baie Verte Mines West Pit, which ultimately recommended the location of the fence. Minor rehabilitation work planned for the Whalesback mine was also completed during the year.

The department also oversaw important rehabilitation work at the Buchans mine site formerly owned by Abitibi Consolidated. In October 2009, the department hired a consultant to conduct a dam safety review of the tailings ponds and dams at the site. Initial findings indicated that immediate action was required and, in response, the department proceeded to make emergency corrections at the site. The final dam safety review report was received in January 2010 and included additional recommendations for tailings pond/dam rehabilitation. In Budget 2010, an allocation of $5 million was made to address the immediate public health and safety issues in Buchans and surrounding communities related to the potential failure of the Buchans tailings dam. The funding will provide for the repair and raising of the tailings dam and covering of the remaining exposed tailings.

3. Promotion of Energy Efficiency practices within government

During 2009-10, the department chaired an interdepartmental working group to develop *Build Better Buildings*, a sustainable buildings policy. This policy will support the Energy

Plan commitment to build all new government and government-funded buildings to the Leadership in Energy and Environmental Design (LEED) silver standard, where practical. This policy also commits government buildings and government-funded buildings to exceed the Model National Energy Code by 25 per cent. During the year the department funded and facilitated a training seminar on LEED which was attended by staff from several government departments as well as Hydro and Newfoundland Power.

The department, along with the Department of Environment and Conservation, also actively promoted government participation in Earth Hour which took place on March 27, 2010.

> *"Earth Hour calls on each of us to take action and make an individual difference in the fight against climate change and I encourage everybody across Newfoundland and Labrador to participate."*
>
> *Minister Dunderdale*

4. Further implementation of EnerGuide for Houses Program

In December 2008, the EnerGuide for Houses Program was launched and during the remainder of the 2008-09 fiscal year, program administration measures were established. In 2009-10, delivery of the program commenced with promotional activity getting under way, pre-evaluation and post-evaluation assessments being conducted and additional service delivery providers coming on stream. Up to the end of the year, participation in the program had exceeded departmental expectations.

As of March 2010, 2,900 pre-retrofit evaluations had been conducted along with 570 post-retrofit evaluations and a total of over $690,000 paid out in provincial grants, with an average payment of $1,215 per household. Homeowners have until March 2011 to complete retrofits and file the post-retrofit evaluation report. As a result, the completion rate is expected to increase over the course of 2010-11 as we approach the end of the program. Of the 570 who have completed the program there has been an average increase in the energy efficiency of homes by 10 points on the EnerGuide for Houses rating scale, resulting in up to 30 per cent energy savings.

During the year program delivery capacity increased with four licensed service organizations in place and a total of 15 evaluators. This is up from two service organizations and seven evaluators in March 2009.

Province-wide promotion of the program was ongoing throughout the year with participation in trade shows, events/fairs, web and radio advertising campaigns, and strategic partnerships with provincial utilities such as TakeChargeNL, industry associations and retailers.

Objectives, Measures and Indicators – 2010-11

Objective:

By March 31, 2011, the Mines and Energy Branches will have implemented initiatives that align with the priority sustainability measures identified through planning activities and continued to identify further opportunities to support sustainable development.

Measure: implemented initiatives and continued identification of opportunities

Indicators:

- Completed Phase One of the Energy Innovation Roadmap and commenced Phase Two, including action in priority areas
- Completed further mine rehabilitation work at Buchans, Baie Verte and Hope Brook mine sites
- Continued implementation of Residential Energy Efficiency Program
- Released report on Coastal Labrador Energy Efficiency Pilot Project – a study conducted with two isolated Labrador communities
- Continued the support of research on alternative energy for isolated communities
- Participated in an international conference on wind energy to explore further opportunities for wind development in the province

Mines and Energy Branches

Strategic Directions

The outcomes achieved by the Mines and Energy Branches with respect to their objectives for the year are consistent with the Minister's strategic directions for the strategic planning period. Many of the successes referenced below are covered in more detail in the Outcomes of Objectives section but are included here to illustrate their strategic importance.

Increased Natural Resource Development and Diversification

During 2009-10, the department made advances in the strategic focus areas of oil, gas and mineral benefit maximization, efficient and effective management, alternative energy development and research and development.

The department participated in benefits discussions with the proponents of two new iron ore projects in Labrador to ensure progressive benefits plans, were developed. The department was also involved in continuing negotiations related to the construction of the new Bloom Lake Railway in Labrador, along with associated benefits for the province.

The department continued to liaise with industry in efforts to support the promotion of the province's supply and service sector. One of the highlights of this activity was the release of a report outlining how the community, industry and government can support the development and growth of an oil and gas sector on the west coast. The report was the result of a partnership between the Department of Natural Resources and the Greater Corner Brook Board of Trade.

During the year, the department took an important step towards increasing benefits to the province from the mineral industry, as well as towards continued efficiency and effectiveness in the management of the industry, as it initiated work on a new mineral policy. This policy will address issues of industry competitiveness and sustainability, environmental responsibility during and after development, the province's mineral legislation and regulations, along with benefits maximization.

The department also took steps to improve internal processes that will help staff in performing their roles of royalties and benefits monitoring for large resource projects, particularly in the offshore oil sector. In addition, improvements were made to energy supply and demand and energy economics modeling tools to better inform the department's negotiations with industry partners for new offshore oil projects such as the

Hibernia Southern Extension.

Finally, the department continued efforts toward research and development (R & D) and alternative energy development through ongoing work on Phase One of the Energy Innovation Roadmap initiative.

Sustainable Resource Development and Usage for the Long Term Benefit of Residents of the Province

During 2009-10, the department made advances in the strategic focus areas of sustainable environmental practices in support of natural resource development, efficient and effective policies and regulations, alternative energy development, long term supply through exploration, and remediation of development sites.

Sustaining the environment, while developing natural resources, is an important focus area for the department. Toward this end, the department completed significant remediation work at former mine sites. In addition, the issue of environmental sustainability and responsibility during and after mineral exploration and development activities has been established as part of the mandate of the mineral policy initiative.

Efficient and effective polices and regulations also play an important role in an industry that is sustainable in the long-term. The mining and petroleum industries are international in scope and, as a result, it is essential that the province's regulatory environment is effective, transparent and competitive with jurisdictions around the world. During 2009-10, the department made important progress toward advancing the province's policy and regulatory framework for these industries. New goal-based Offshore Drilling and Production Regulations were introduced in December 2009 and progress was made on the development of other new and revised regulations for both the onshore and offshore petroleum sectors. Work on the new mineral policy for the province will also contribute to these efforts.

The department continued work on its commitment to alternative energy development through its ongoing work on the Energy Innovation Roadmap project. The development of alternative energy technologies will benefit the province from an environmental standpoint through the production of clean energy. It will also benefit the province by creating new sources of energy which can be used by industrial clients, and others, in the mining and petroleum industries.

During the year, the department made significant advances in the collection, publication,

distribution and promotion of geoscience data in efforts to encourage continued exploration activities in the mineral sector, as well as the onshore and offshore petroleum sectors. In addition, the province increased funding to the Mineral Incentive Program to assist prospectors in funding their exploration projects. The new mineral policy which the department began work on during the year will also address industry sustainability by identifying changes required to industry that will help enable and promote continued exploration and development.

> *"Continued growth and development will encourage people interested in the industry to establish successful careers in the province. Many doors will be opened for our young people and will provide them with bright and prosperous futures right here at home in Newfoundland and Labrador."*
>
> *Minister Dunderdale, as Acting Premier*

Improved Stability and Competitiveness of the Supply of Electricity

During 2009-10, the department made advances in the strategic focus areas of energy efficiency and conservation and alternative energy research and development.

Improving the stability of the electricity industry can be achieved by increasing energy supply and reducing energy demand. With the province assuming the rights to the hydroelectric assets previously operated by Abitibi, the province's energy supply has been increased significantly. Focus was applied by the department during the year to reducing demand for electricity through continued implementation of the EnerGuide for Houses Program, as well as the promotion of energy efficiency practices within government. In addition, continued participation in the Energy Innovation Roadmap initiative contributed to the overall goal of identifying alternative energy technologies for the province through research and development.

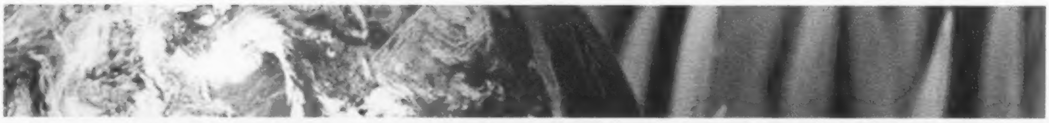
Additional Highlights and Accomplishments

Vale Hydromet Plant

Construction activity on Vale's nickel processing plant at Long Harbour began in April 2009. The construction phase will take approximately four years and will result in the completion of a multi-billion dollar facility that is projected to produce 50,000 tonnes of nickel per year using concentrate from the Voisey's Bay mine in Labrador. When operational, the facility will provide well-paying jobs in the Placentia area for the next two decades. Peak construction employment is expected to occur in 2011. The processing plant is expected to employ an average of 450 people when it becomes operational in 2013.

For this project, Vale has also signed an agreement with the RDC for special measures to advance women into union positions and for every worker to contribute 20 cents from every hour worked to support the implementation of plans to advance women in the workplace.

Artist's rendering of Nickel Processing Plant



First Offshore Discovery outside Jeanne D'Arc Basin

In April 2009, StatoilHydro announced a discovery in the Flemish Pass Basin, approximately 500 kilometres east north-east of St. John's. This exciting discovery is a testament to the undiscovered potential that exists in the province's offshore deepwater region and it bodes well for future exploration activity and further discoveries. Newfoundland and Labrador's three producing oil fields – Hibernia, Terra Nova and White Rose – are all situated in the Jeanne D'Arc Basin, making StatoilHydro's find the first discovery outside of this basin.

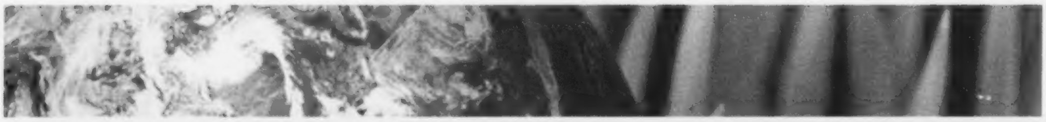
The discovery was the result of a drill stem test that was conducted during the drilling of StatoilHydro's deepwater exploration well Mizzen 0-16. StatoilHydro was operator of the well in Exploration License (EL) 1049 with a 65 per cent interest. Husky has the remaining 35 per cent interest. Further work will be completed to determine the size of the hydrocarbon accumulation. Since the announcement of the discovery, StatoilHydro, along with Husky, applied for and was granted a Significant Discovery License (SDL) by the C-NLOPB for this find.

> *"We are excited at the prospects and optimistic that this will lead to increased exploration and interest in the deeper waters of our offshore."*
>
> *Minister Dunderdale*

Forum on Large-Scale Hydroelectric Development: Aligning Economic and Environmental Goals

The Council of the Federation Forum on Large-Scale Hydroelectric Development: Aligning Economic and Environmental Goals was held in St. John's on October 21, 2009. The forum was co-chaired by the Honourable Kathy Dunderdale, Minister of Natural Resources, and the Honourable Charlene Johnson, Minister of Environment and Conservation.

The forum was attended by 82 provincial participants including delegations from Manitoba, Prince Edward Island, New Brunswick, Nova Scotia, Ontario, Quebec, Alberta and British Columbia. Delegations were made up of representatives from provincial governments, utilities and crown corporations. Federal government officials from the Canadian Environmental Assessment Agency, the Atlantic Canada Opportunities



Agency and Environment Canada also attended.

The forum was designed to take a focused look at large-scale hydro in the context of addressing climate change, and how to advance development in a consultative and balanced manner. Speakers included government officials, public and private sector developers, non-governmental organizations, industry associations and an expert on aboriginal consultation. The discussions focused on the economic and environmental fundamentals of large-scale hydroelectric development, the role large-scale hydro can play in achieving emission reductions and best practices to ensure effective environmental assessment and aboriginal consultation.

Hibernia Project reaches "Payout"

After nearly 12 years of production, the Hibernia project is now in payout, meaning that its costs have been covered, and the province will now be able to reap a much more lucrative set of benefits. From this point on, the province will receive a royalty of 30 per cent of net revenues.

> *"Hibernia is the project that put us on the map as a world-class oil producer and the continued success of this development, as well as our two subsequent developments, shows the world that we are indeed in the oil business and a good place to invest."*
>
> *Minister Dunderdale*

Community Outreach: Rock and Mineral Kit

A collection of 46 rock, mineral and fossil samples from different regions of the province was compiled into a unique teaching tool that is being incorporated into the Grade seven school curriculum. A Newfoundland and Labrador Rock and Mineral Kit has now been distributed to every school in the province to complement existing program requirements in the area of earth sciences. The kits show the diversity of the minerals found in this province and demonstrate the importance of mining and geology to the provincial economy. Through the use of these kits, students will learn about the properties of minerals mined here, the products that are made from them and the opportunities that exist within this exciting and growing sector.

The development of the kit was a joint initiative between the Department of Natural Resources' Geological Survey Division, the provincial branch of the CIM and the Department of Education's Program Development division.

Mines Branch Outreach Geologist displays a Rock and Mineral Kit

> *"These kits show the diversity of the minerals found in this province and demonstrate the importance of mining and geology to the provincial economy. Through the use of these kits, students will learn about the properties of minerals mined here, the products that are made from them and the opportunities that exist within this exciting and growing sector."*
>
> *Minister Dunderdale*

Oil and Gas Week

Oil and Gas Week ran from February 22 – 27, 2010 with this year's theme being *Energy For Today and Tomorrow*. Oil and Gas Week showcases the province's continually growing petroleum industry and the valuable role it has in strengthening the economy.

An important part of Oil and Gas Week is the focus placed on high school, secondary and post-secondary students. Students are introduced to the industry and the potential career opportunities available to them.

Provincial Mining Week

Provincial Mining Week ran from November 1 to November 7, 2009. It featured many activities and events exploring the industry and included the annual gathering of industry participants and partners for Mineral Resources Review 2009 - *The Newfoundland and Labrador Mineral Industry: Meeting the Global Economic Challenge*. Mineral Resources Review, the largest mining conference and trade show in Atlantic Canada, was a joint initiative between the Mines Branch of the Department of Natural Resources and the provincial branch of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). The conference included technical presentations, sector overviews, poster exhibits by the Mines Branch and a gold-panning workshop.

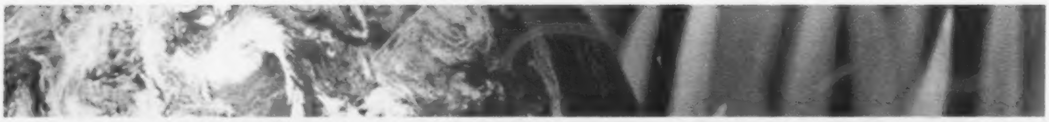
Progress on Lower Churchill Development

New Recall Power Arrangements

For the first time in the province's history, Newfoundland and Labrador began wheeling hydroelectric power through neighbouring Quebec into the North American marketplace. Nalcor Energy, through Hydro, signed an agreement to wheel power through Quebec to the Canadian–United States border.

Hydro signed a Transmission Service Agreement with Hydro Quebec (HQ) under HQ's Open Access Transmission Tariff for power transmission from the Labrador to the Canada-U.S. border. Hydro is then selling power on the Canadian side of the border to Emera Energy. Emera Energy began selling that power to the energy markets in Canada and the United States on April 1, 2009. This power is from the "recall block" to which Newfoundland and Labrador Hydro has access from the Upper Churchill project.

> *"This is a significant development for us to share our excess green renewable energy with the rest of North America through our transmission access through Quebec and our subsequent arrangement directly with Emera Energy."*
>
> *Minister Dunderdale*



Water Management Agreement Established for the Churchill River

A ruling by the Public Utilities Board (PUB) in early 2010 resulted in the establishment of a water management agreement on the Churchill River between Nalcor Energy and the Churchill Falls (Labrador) Corporation. The conclusion of this agreement is another step toward realization of the Lower Churchill Project.

Government moved to regulate the coordination of water management on provincial rivers in 2007. This was accomplished through amendments to the Electrical Power Control Act to provide the PUB with the authority to regulate the water management agreements. These agreements provide certainty over the coordination of water flow when two or more operators are on the same river. The Water Management Regulations that accompanied the amendments provide direction to the PUB for the review or establishment of water management agreements.

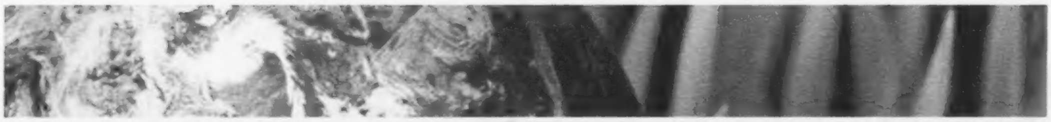
New Dawn Agreement

In September 2008, the Government of Newfoundland and Labrador and the Innu Nation signed an agreement appropriately coined Tshash Pet-apen Agreement, or the New Dawn Agreement. The Tshash Petapen Agreement resolved outstanding issues in three anticipated agreements fundamental to the future relationship between the Innu people of Labrador and the Province of Newfoundland and Labrador:

- Innu Rights Agreement
- Lower Churchill Project Impacts and Benefits Agreement
- Upper Churchill Redress

The Tshash Petapen Agreement was negotiated at the most senior levels of the Innu Nation, the Province of Newfoundland and Labrador and Nalcor Energy. In February 2010, the finalization of the agreements contemplated in the Tshash Petapen Agreement were initialed by all parties. These agreements will now be subject to ratification by the Innu people.

Upper Churchill Redress – The agreement provides compensation to the Labrador Innu for impacts associated with the Churchill Falls development over the full project lifecycle. The compensation structure is $2 million per year upon execution of the final agreement until 2041, after which the Labrador Innu will be entitled to a percentage of revenue from the project.



Lower Churchill Project Impacts and Benefits Agreement – The Innu Nation was given the option of taking an equity position in the project or an equivalent royalty and has chosen the royalty option: five per cent of net project revenue; and, $5 million per year payable upon project sanction until commercial power.

These agreements facilitate the tripartite land claim negotiation process towards an Agreement-in-Principle as they bring closure to several significant bilateral issues between the Government of Newfoundland and Labrador and the Innu Nation.

Province's Equity Stake Recouped with Discovery of New Oil

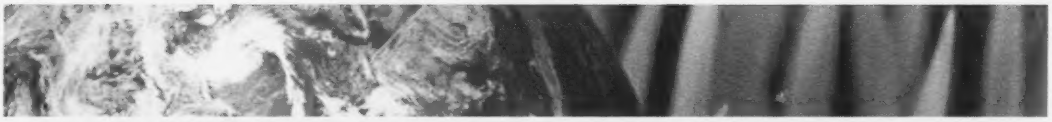
On November 23, 2009, Husky Energy announced that it discovered additional oil resources in the North Amethyst field, a White Rose extension area. The current estimate of the newly-discovered resource ranges from 30 to 85 million barrels of light crude oil, with the best estimate at this point being 60 million barrels.

The province, through Nalcor Energy, obtained a five per cent equity interest with the negotiation of the agreement for the White Rose extension. As a result of the discovery of this additional oil, the province will benefit through Nalcor by such a large amount that it is the same as recouping the purchase price of our equity in the White Rose Extension project and our equity in the Hibernia Southern extension field. In fact, depending on recovery rates and the price of oil during production, this one discovery will cover all, or substantially all, of the purchase price of government's equity share in the Hebron development as well. This announcement demonstrates why taking an equity stake in our resources is such an important and worthwhile public policy.

Province Hosted 2009 Energy and Mines Ministers' Conference

Newfoundland and Labrador's energy and mining sectors were front and centre during the 2009 Energy and Mines Ministers' Conference held in St. John's on August 31 and September 1 as ministers discussed topics ranging from energy efficiency to green mining. The annual conference of federal, provincial and territorial energy and mines ministers was co-hosted by the Honourable Kathy Dunderdale, Minister of Natural Resources for Newfoundland and Labrador, and the Honourable Lisa Raitt, Minister of Natural Resources Canada.

This year's conference, *Challenges and Opportunities*, addressed the obstacles and opportunities facing the energy and mining sectors as a result of the downturn in the



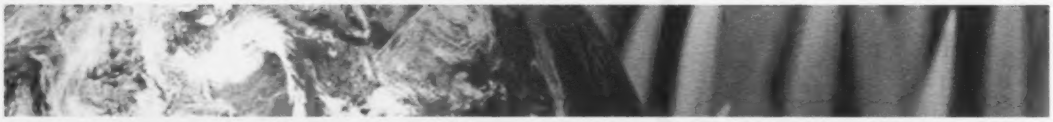
global economy. The conference included information sessions on short- and long-term industry challenges, investment opportunities, recovery from the financial recession and international competitiveness. Innovation and technology, research and development and sustainable green energy solutions were also discussed.

Federal, Provincial and Territorial Ministers at EMMC

From left to right: Peter Taptuna, Minister of Mines, Economic Development and Transportation, Nunavut; Richard E. Brown, Minister of Environment, Energy and Forestry, Prince Edward Island; Mel Knight, Energy Minister, Alberta; Jim Rondeau, Minister of Science, Technology, Energy and Mines, Manitoba; Michael Gravelle, Minister of Northern Development, Mines and Forestry, Ontario; John MacDonell, Minister of Natural Resources, Nova Scotia; Lisa Raitt, Minister of Natural Resources Canada; Kathy Dunderdale, Minister of Natural Resources, Newfoundland and Labrador; Wally Stiles, Minister of Natural Resources, New Brunswick; Jack Keir, Minister of Energy, New Brunswick; Bill Estabrooks, Minister of Energy, Nova Scotia; Bill Boyd, Minister of Energy and Resources, Saskatchewan; Robert McLeod, Minister of Industry, Tourism and Investment, Northwest Territories, and Serge Simard, Minister for Natural Resources, Quebec.

Premiered at the conference was a new promotional video showcasing Newfoundland and Labrador as a world leader in energy innovation. The video was a project of the Department of Natural Resources and Nalcor Energy and highlights the work being done on the Lower Churchill Project, including the planned sub-sea transmission link to the island. It also features the Ramea research and development project being undertaken by Nalcor Energy and partners to identify energy alternatives for isolated, diesel-

powered communities. This video is available for broadcast and can be viewed on YouTube at http://www.youtube.com/watch?v=4XzltqJMMHI.



Shared Commitments

The Department of Natural Resources has legislative oversight for the following public bodies related to the mines and energy sectors: Nalcor Energy and its subsidiaries including Hydro, Churchill Falls (Labrador) Corporation, Twin Falls Power Corporation, Lower Churchill Development Corporation, Gull Island Power Corporation and Bull Arm Fabrication Site; and the Mineral Rights Adjudication Board.

The department also shares jurisdiction over offshore petroleum resources with the Federal Government and participates in its management through the C-NLOPB.

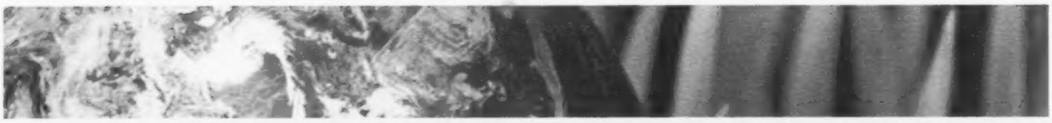
The department works closely with each of these public bodies toward fulfillment of the strategic directions of the Minister of Natural Resources. Some of the more significant shared initiatives that occurred during the 2009-10 fiscal year are as follows:

Land Sales

In November 2009, the C-NLOPB announced the results of the 2009 Call for Bids for exploration rights in the Newfoundland and Labrador Offshore Area. Successful bids totaling $47,000,211 were received on all four parcels offered. One of the successful bid parcels is located in the Jeanne d'Arc Basin, two of the successful bid parcels are located in the Laurentian Subbasin and the remaining successful bid parcel is located in the Western Newfoundland and Labrador Offshore Region. This is the first time that the C-NLOPB has had a Call for Bids in the Laurentian Subbasin since the organization was established in 1986.

Bid parcels are awarded to the companies who submit bids representing the highest work commitments, which can include up to five per cent of their bid going into research and development and support for education and training in the provincial oil and gas industry.

> *"Our industry partners continue to demonstrate their confidence in our basins and petroleum prospects. Our basins hold tremendous resource potential and the interest being shown in these areas bodes well for exciting new future discoveries, upon which our industry will continue to grow."*
>
> *Minister Dunderdale*



Development Plan Approvals

In September 2009, the C-NLOPB announced Federal and Provincial Government approval of the Fundamental Decision to approve Hibernia Management and Development Company's (HMDC) Development Plan application for the AA Block which covers part of the Hibernia Southern Extension area.

Under the Atlantic Accord Implementation Acts, Fundamental Decisions of the C-NLOPB must be ratified by both governments before they can be implemented. The approval of both governments will enable HMDC to proceed with development of the AA Block from its existing Gravity Based Structure (GBS). The AA Block is estimated to contain 48 million barrels of oil.

Opportunities and Challenges

Opportunities

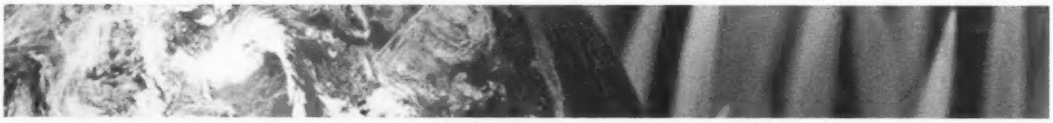
Resource Exploration, Development and Promotion

The province has active and profitable mining and petroleum resource sectors which make significant contributions to the province's economy. While many mineral and petroleum developments are ongoing, Newfoundland and Labrador still possesses vast untapped resources in these sectors. In the oil and gas sector, for example, approximately 2.9 billion barrels of oil and 11 trillion cubic feet of natural gas reserves have been discovered to date while an estimated six billion barrels of oil and 60 trillion cubic feet of natural gas remain undiscovered. Similarly, in the mineral sector, exploration efforts are uncovering new resource finds for a variety of mineral types on an ongoing basis. The department will play an important role in sector sustainability by continuing to promote the province's known resources, contributing to the enhancement of the province's resource knowledge base and encouraging continued exploration by industry participants.

Drill Set-Up, South Coast Newfoundland

Benefits Monitoring / Maximization on Major Projects

In addition to promoting continued resource exploration and development activity, the department also has a key role in terms of maximizing benefits to Newfoundland and Labrador when resource development projects are underway. The department will continue to work with the C-NLOPB and industry partners on the maximization of economic and employment benefits from the Hebron development project, as well as other offshore projects as they come on stream. Similarly, the department will continue to require benefits plans for new mineral development projects.



Mines and Energy Branches

Progressive Gender Equity Action

The department is in a unique position to be able to advance the economic interests of women in the approval and monitoring of major resource development projects. The province will continue to require all such projects to submit Women's Employment Plans (WEPs) with quantifiable targets for the training, employment and advancement of females. To help guide the WEP process the department will be developing a Gender Equity and Diversity Policy Framework. In addition, we will be taking concrete steps within the department to increase opportunities and career growth for female employees.

Development and Promotion of Clean Energy

In addition to a vast warehouse of non-renewable resources, Newfoundland and Labrador possesses a tremendous capacity to generate and transmit renewable, clean energy both for its own use and for export to the rest of North America. The department must continue to work with Nalcor as it makes advances toward the sanctioning of the Lower Churchill Project, the most attractive undeveloped hydro-electric project on the continent. The department will also continue to move forward with the Energy Innovation Roadmap to provide direction, focus and priorities for the province's future energy technologies. Hand-in-hand with these efforts, the department must continue to promote the province's clean energy capacity to potential markets in other parts of Canada and the United States to raise awareness and stimulate demand for our green energy.

Ramea Wind Project

Minerals Strategy Development

Newfoundland and Labrador is blessed with rich mineral resources which have been a source of wealth, employment and raw materials throughout our history. The mineral sector provides jobs, tax revenue and contributes significantly to the province's GDP. The sector offers opportunities to develop the economy of rural areas of the province and is particularly important in Labrador where 98 per cent of the province's mineral development currently takes place.

Geological Survey: Sampling in Labrador

The ongoing development of mineral resources requires the province to strike a balance between encouraging development, protecting the environment, and ensuring maximum benefits to the people of the province. The last review of mineral policy and legislation occurred in the 1970s and marked a major change in the way the industry was managed, introducing competitive staking, and outlining new legislation. Since then the industry has changed dramatically and new challenges must be faced to ensure the province has an industry that is competitive and sustainable for the long-term and that the people of the province can enjoy continued economic benefits.

The Minerals Strategy will represent a progressive and comprehensive government strategy to sustain and further develop the mining industry in Newfoundland and Labrador. During the development of the strategy, the department will assess the potential of the mineral industry throughout the province, including a close look at the opportunities and existing supporting infrastructure in Labrador, and will examine its own regulatory processes and capacity to meet the growing demand forecasted in the sector.

> *"The mining sector is a major economic contributor to the economy of rural Newfoundland and Labrador and represents nearly 12 per cent of the province's Gross Domestic Product. To ensure its continued growth and success, we need a plan for capitalizing fully on the economic and employment opportunities associated with this burgeoning industry."*
>
> *Minister Dunderdale*

Challenges

Human Resource Capacity

Not unlike other industries, the mining and petroleum sectors in the province are experiencing a skilled labour shortage as companies from around the world recruit for the same pool of qualified resources. The Department of Natural Resources also feels the effect of this shortage as it tries to attract and retain professionals in the areas of petroleum engineering and geoscience, as well as mineral resource scientists such as geologists, geophysicists and paleontologists. Shortages in these areas have the potential to impact the department's ability to deliver programs and services to the resource sector and will require innovative recruitment and retention practices.

Governance and Regulation

A challenge facing governments world-wide is providing the appropriate balance of industry regulation to provide public safety, conservation of resource and environmental protection while, at the same time, encouraging continued investment. Given the recent occurrence of the catastrophic oil leak in the Gulf of Mexico, no industry is under more scrutiny than the offshore oil sector. Along with the C-NLOPB, the department will continue to monitor the situation in the Gulf to determine if there are lessons that should be applied to the regime in this province. To supplement this work, the Provincial Government has hired an independent consultant to perform an assessment of the offshore oil spill prevention and response capabilities in place in Newfoundland and Labrador. The government's goal is to ensure the offshore petroleum industry in Newfoundland and Labrador has the best possible prevention and response procedures in the world. Throughout the process government will work to protect human life and the environment while also ensuring that the province's offshore is an attractive place to do business.

Lower Churchill

One of the key pieces that must be in place in order for the Lower Churchill project to receive sanction is the establishment of a transmission route for Lower Churchill power. The preferred method is to transmit power from Labrador through Quebec and into the northeastern United States. To date, the province has been denied access to this route by Hydro-Quebec, as well as the Régie de l'énergie (Régie), Québec's energy regulator.

Nalcor will make a decision in the very near term as to what appeal avenues will be pursued regarding the decision in Quebec regarding this matter. In the meantime, the decisions in Quebec do not mean that we are stopping or slowing down plans to develop this extraordinary clean, renewable energy project. The province is also pursuing alternative routes to market, including the Labrador-Island Link, the Maritime route, as well as the pursuit of a separate 724 MW transmission service request into the Maritimes and New England.

Forestry and Agrifoods Agency

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Forestry and Agrifoods Agency

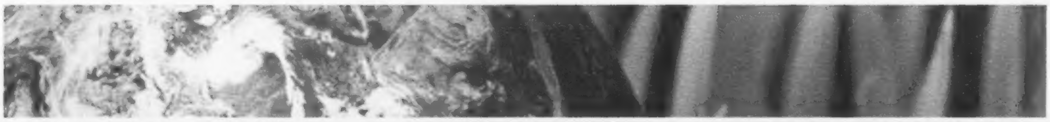
Introduction

The Forestry and Agrifoods Agency (the agency) has made great strides in supporting the economic advancement and sustainability of the forestry, agriculture and agrifoods sectors in the province over the past year. The agency had expenditures of $69.2 million in the 2009-10 fiscal year. These expenditures focused on programs and services to support opportunities that provided economic and employment benefits to many regions throughout Newfoundland and Labrador.

The agency's focus has been on three main issues over this past year: 1) growth and diversification of the agriculture and agrifoods industry, 2) competitiveness in the forestry sector and 3) sustainable resource management. The agency has invested in key areas in the agriculture and agrifoods industry for agribusiness advancement opportunities. Funding programs such as the Agriculture and Agrifoods Development Fund, the Provincial Agrifoods Assistance Program and Growing Forward (Federal-Provincial cost-shared program) have assisted the industry to move forward in key strategic areas.

The focus for the agency's Forestry Services Branch has been to enhance competitiveness of the sector and identify opportunities for value-added production in the forestry industry. This is a critical piece in supporting the development of a provincial marketing strategy for the solid wood products sector. The agency provided the Residential Wood Pellet Appliance Rebate Program for a second year in 2009-10 to support the emerging provincial wood pellet manufacturing sector.

In addition to economic advancement, the agency is also focused on ensuring the long-term sustainability of the forestry, agriculture and agrifoods sectors throughout Newfoundland and Labrador. We will continue to work with industry to ensure that these sectors will be providing benefits to future generations in our province. Sustainable development through our forestry and agrifoods programs will be essential to ensure continued development and success.



Forestry and Agrifoods Agency

Overview of the Agency

The Forestry and Agrifoods Agency was established under the *Executive Council Act*. It is a category one public body under the *Transparency and Accountability Act*.

Vision

The vision of the Department of Natural Resources is a province that realizes the full benefit from the sustainable development of its natural resources.

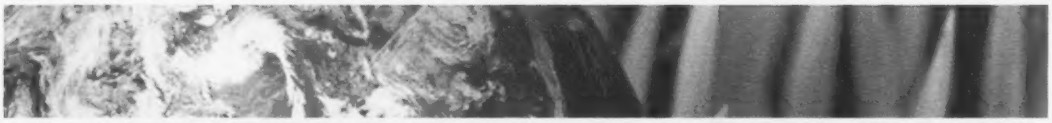
Mission Statement

By March 31, 2011, the Forestry and Agrifoods Agency will have implemented programs necessary to sustain the province's forest ecosystems, identified and facilitated further opportunities for sustainable forestry, agriculture and agrifoods resource development and optimized the benefits received from these resources.

Mandate

The mandate of the Forestry and Agrifoods Agency includes the supervision, control and direction of all matters relating to:

- forest resources and utilization, constructing and maintaining forest access roads, forest protection from fire and insects, silviculture, inventory, conservation,and management;
- preparation of management plans, surveying, mapping and development of forest resources;
- enforcement and compliance responsibility in the areas of forestry and wildlife and assisting in enforcement in the areas of inland fisheries, motorized snow vehicle and all-terrain vehicle usage;
- agriculture including (without limitation of the word "agriculture,"), agrifoods, agronomy, horticulture, animal husbandry, aviculture, the development of forage production and the growing of hay and the products of agriculture, including (without limitation of the word "products,"), animals, meats, fur, eggs, poultry, wool, dairy products, berries, grains, seeds, fruit (including wild fruit), fruit



products, vegetables and vegetable products;

- animal health;
- food technology and marketing; and
- agricultural land and the sustainable utilization, protection, conservation, management, surveying, mapping and development of agricultural land.

The agency's responsibilities for supporting natural resource development in the forestry, agriculture and agrifoods sectors are provided through two branches. The Policy and Planning Division provides policy support and coordination for both branches within the agency.

Forestry Services Branch

The **Forestry Services Branch** is responsible for managing and regulating the forest resources of the province. Programs and services are provided through the following divisions within the branch: Forest Ecosystem Management, Forest Engineering and Industry Services, Legislation and Compliance and Ecosystem Sustainability and Research. District offices operate within three regions – Eastern, Western and Labrador.

Agrifoods Development Branch

The **Agrifoods Development Branch** is responsible for promoting the continued development, expansion and diversification of competitive and sustainable primary and value-added agriculture and agrifoods businesses. Programs and services are provided through the following divisions within the branch: Agriculture Business Development, Animal Health, Land Resource Stewardship and Production and Market Development.

Employees

As of March 31, 2010, the Department of Natural Resources' Forestry and Agrifoods Agency had 392 staff on payroll. Employees with the agency work in offices located in St.John's, Corner Brook and in district offices and units located throughout the province. The table below provides the breakdown of staff in each branch.

Forestry and Agrifoods Agency

Branch	**Female**	**Male**	**Total**
Forestry Services	60	219	279
Agrifoods Development	50	63	113
Total[1]	**110**	**282**	**392**

1. This figure does not include: the entire staff complement of seasonal employees employed in the Forestry Services Branch (majority male), employees in communications and ministerial support shared with the Mines and Energy Branches and employees with corporate services shared with other departments.

Physical Location

There are 24 forest management district offices and eight agricultural units throughout the province. The headquarters of the agency are located at the Fortis Building in Corner Brook.

Fortis Building
P.O. Box 2006
Corner Brook, NL
A2H 6J8

Website

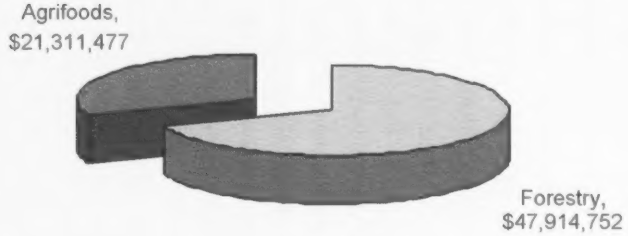
The Department of Natural Resources website is located at: **http://www.gov.nl.ca/nr.**

Budget

Expenditures for the Forestry and Agrifoods Agency in fiscal year 2009-10 totaled $69.22 million. This figure does not include $6.02 million related to executive and support services which are shared with the Mines and Energy Branches. The following chart provides a breakdown of expenditures by branch. See Appendix II for additional details.

Forestry and Agrifoods Agency

Expenditures 2009-10



Lines of Business

Enforcement and Compliance of Legislated Requirements

The agency's responsibility for enforcement of the province's forestry and wildlife legislation is delivered through a regional services structure. In addition, the agency collaborates with other government departments and agencies in enforcement of the federal *Fisheries Act (Inland Fish)*, the *All-Terrain Vehicle (ATV) Regulations* and the *Migratory Birds Convention Act*. The agency is responsible for monitoring timber harvesting operations as well as patrolling hunting areas for compliance with the regulations under the various acts noted above.

Licensing and Permitting

The agency's regional and district offices issue several licenses and permits that are directly related to the Forestry Services Branch mandate. As examples these include: domestic and commercial timber harvesting permits, commercial and domestic sawmill licenses, permits to burn during the fire season and timber purchase licenses. These offices also issue several permits and licenses on behalf of the Department of Environment and Conservation. Examples of these include: livestock protection from coyote permits, permits to transport big game in closed season, distribution of big game meat permits, Salmonier Nature Park entry/travel permits and permits to destroy problem animals. All permits and licenses issued by the forestry services branch can be viewed on the agency's website.

Regional Services

The policy and programs associated with sustainable forest management, health and services are implemented through a regional/district structure. Regional Services is responsible for the delivery of the silviculture, resource roads, forest fire suppression, and enforcement/compliance programs. In addition, Regional Services is responsible for dealing with wildlife issues related to public safety (road kills, injured animals, etc.), public awareness programs (presentations to schools, service clubs, etc.), addressing public concerns on other forest resource management issues and the development of district sustainable forest management plans.

Sustainable Forest Management

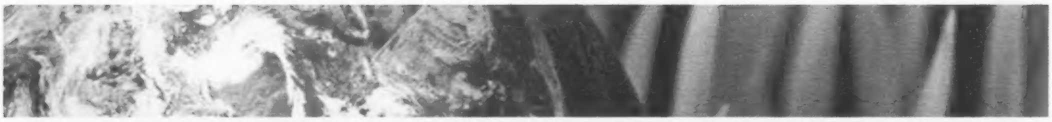
Through the agency's headquarters in Corner Brook and offices in St. John's, the agency is responsible for policy, legislation, programs and forest management planning that enable the residents of the province to benefit from the ecosystems provide while ensuring their sustainability and health. These programs include silviculture, resource roads construction, forest inventory, forest fire suppression, forest insect control, forest management planning, enforcement/compliance and industry development.

Animal Health

Animal health services generally involve any aspect of animal health that is justifiably in the public interest and within those budgetary limits set by the Provincial Government, including: farm animal veterinary services (livestock and poultry); laboratory analyses (veterinary diagnostic and food safety); control of food quality (milk and meat); monitoring and control of animal disease of economic or public health interest; professional witnesses in cruelty to animals complaints; assistance to police and wildlife officials; and control of heritage animals.

Business Development Services

The agency delivers and administers a wide range of business development services and programs including: Production Insurance, the Provincial Agrifoods Assistance



Program, and the Agriculture and Agrifoods Development Fund; Grants and Subsidies for the Newfoundland and Labrador Federation of Agriculture, 4-H Program, and the Provincial Training Program; and Professional Advisory Services through eight agriculture representatives and three farm management specialists.

Land Management

The agency's land management program includes: the Land Use Program involving the Real Property Tax Exemption Program, Land Consolidation Program, and Environmental Farm Planning Program; Agriculture Limestone Program; Soil Survey Program; and the Soil Fertility and Laboratory Services Program.

Production and Market Development

The agency offers a wide range of programs and services aimed at maximizing production and market development at the primary and secondary levels. These programs and services include: professional and technical support; pest control training; research and development; market development; market intelligence; on-farm food safety; and marketing and promotion.

2009-10 Year in Profile

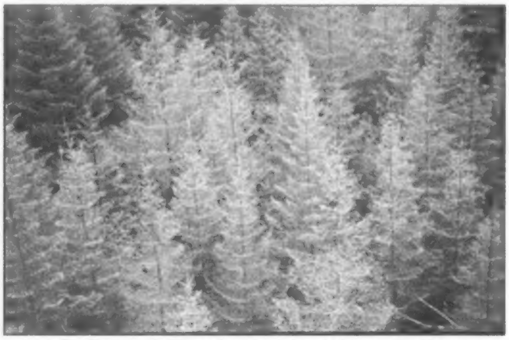
The Forestry and Agrifoods Agency has worked over the past year with the forestry and agriculture sectors providing programs and services to support the economic and sustainable advancement of these natural resources throughout Newfoundland and Labrador. The following sections profile some of the accomplishments of the agency during 2009-10.

1. Forest Fire Suppression Adopts Incident Command System

Fire Suppression Crew "Mopping Up' Hot Spots

The Forest Fire Management and Coordination Section of the agency's Forestry Services Branch has taken significant strides in the promotion and adoption of an Incident Command System (ICS) for the suppression of large project fires. Through its membership with the Northeastern Forest Fire Commission, the agency was able to avail of extensive training over the course of the past two years. Experienced fire suppression staff with the agency received several rounds of intensive ICS training in Portland, Maine and Fredericton, New Brunswick in the development of special Incident Management Teams. These teams will be activated during large project fires and will coordinate the suppression activities. The objectives are to improve suppression efforts, to be more efficient, to improve fireline safety and to be more cost effective. When final training is completed, the credentials of these individuals will be recognized nationally and they will be given the opportunity to participate in large fires in other jurisdictions.

2. Province Successfully Combats Hemlock Looper in Labrador

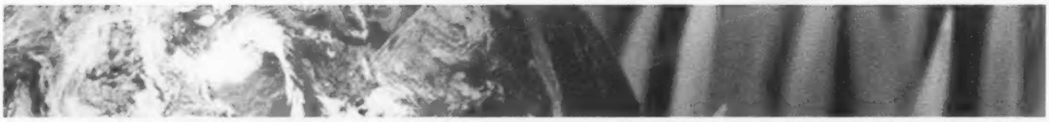

Softwood Stand - Hemlock Looper Damage

In the summer of 2009, the Forest Insect and Disease Section of the Forestry Branch were successful in the control of a hemlock looper infestation along the south coast of Labrador near the communities of Port Hope Simpson, Cartwright and Mary's Harbour. The hemlock looper normally attacks mature balsam fir stands and with a high enough population can lead to stand mortality within one season. Monitoring of this insect is of high priority and when the results of 2008 fall survey plots forecasted a high population for the summer of 2009, an aerial suppression program was activated. To combat the insect, a naturally occurring biological insecticide, BtK, was sprayed over the forest during the month of July and post-spray surveys have proven that the program was highly successful. Fall survey work indicated very low population numbers and the threat of significant forest defoliation was reduced. All work conducted under the program was completed in strict adherence to operating permits issued by the Department of Environment and Conservation and all products utilized were registered by the Federal Pesticide Regulatory Management Agency.

3. Agriculture and Agrifoods Development Fund invests in the Dairy and Mink Sectors

Dairy Farm

The Agriculture and Agrifoods Development Fund was established to encourage the development, diversification and expansion of large-scale agricultural projects in either the primary or secondary processing sectors, and is intended to stimulate and attract investments in the industry. The fund invested $1.34 million in the agriculture and agrifoods industry this year. Dairy Farmers of Newfoundland and Labrador was provided funding to establish a large-scale land development initiative to increase forage production for the sector and reduce the reliance on



imported feeds. This investment will enhance the competitive capability and profitability of Newfoundland and Labrador dairy farms. Six million dollars was approved for this project over a three-year period.

> *"This is a strategic investment in a key area that will see the dairy industry advance and ensure its long-term sustainability."*
>
> *Minister Dunderdale*

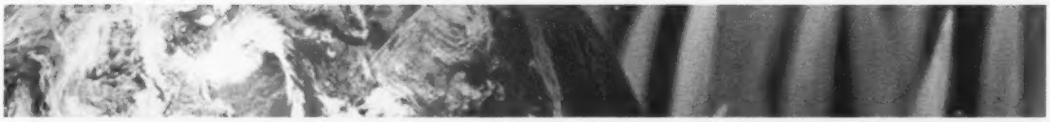
Funding was also provided for the establishment of a feed facility for the mink sector. Investment in the feed kitchen and cold storage facility will enable the mink sector to freeze and utilize fish offal for mink diets which will reduce the reliance on imported prepared feed and create feed efficiencies.

4. Final Year of Aleutian Disease Management Program

This fiscal year was the second and final year for the Aleutian Disease Management Program (ADMP) which was delivered under the agency's Production and Market Development Division. Twelve mink producers and the Newfoundland and Labrador Fur Breeders Association (NLFBA) received $1,124,325 for projects during the 2009-10 fiscal year. The program was designed as an emergency response to the threat of Aleutian disease to Newfoundland and Labrador's mink industry. Producer projects centered on biosecurity improvements, which included fence construction and improvements to sheds and buildings and awareness of Aleutian disease.

5. Consultation and Review of Animal Protection Legislation Completed

A review and consultation process to consolidate and update existing animal health and protection legislation has been completed. Six live animal statutes were reviewed with the intent to develop a new, modern and tougher *Animal Health and Protection Act*. During this process the Forestry and Agrifoods Agency consulted with the Society for the Prevention of Cruelty to Animals (SPCA), municipalities and representatives from the livestock industry and considered submissions from other special interest groups and the public.



Outcomes of Objectives

This section of the Annual Performance Report details the significant work undertaken and completed by the agency on its objectives for 2009-10, and progress toward achieving the goals of the agency's 2008-2011 Strategic Plan. The outcomes achieved by the agency with respect to goals and objectives for the year are consistent with the Minister of Natural Resources' strategic directions for the strategic planning period. Accomplishments related to issues one and two contribute to strengthening the agency's ability to increase forestry, agriculture and agrifoods development and diversification. Accomplishments related to issue three are important in meeting our strategic direction of improved sustainable resource development and usage for the long-term benefit of residents of the province. These strategic directions are contained in the Department of Natural Resources Strategic Plan which can be viewed at www.gov.nl.ca/nr.

Issue 1: Growth and Diversification of the Agriculture and Agrifoods Industry

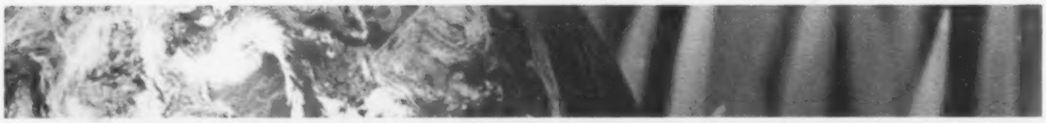
The agriculture and agrifoods industry in the province has achieved great success over the past several years. In order to continue to strengthen the existing industry, it is important to identify the priorities and key focus areas for the agriculture and agrifoods sectors in Newfoundland and Labrador. Through consultations with industry, the agency heard the strategic focus areas that will help our agribusinesses to grow and diversify. Through the agency's programs and services, we will continue to assist the industry to reach its full potential.

Goal:

By March 31, 2011, the Forestry and Agrifoods Agency will have enhanced programs to support the growth and diversification of the agriculture and agrifoods industry.

Objective:

By March 31, 2010, the Forestry and Agrifoods Agency will have identified priority programming to support growth and diversification of the agriculture and agrifoods industry.



Measure: Identified priority programming to support growth and diversification of the agriculture and agrifoods industry

Progress 2009-10

1. Completed agriculture and agrifoods industry consultations for the identification of priority areas for industry.

Consultation sessions with the agriculture and agrifoods industry in four regions (Eastern, Central, Western and Labrador) were completed in August 2009. Participants were representative of the various agriculture and agrifoods sectors. These sessions gave the industry the opportunity to provide comments on the key priority areas for the advancement of the agriculture and agrifoods industry in Newfoundland and Labrador. Information obtained from these consultations has been incorporated into the agency's draft agriculture and agrifoods strategy.

2. Identified strategic actions to support growth and diversification of the agriculture and agrifoods industry.

Based upon the outcomes of the consultation sessions, key areas have been identified for the long-term plan for the agriculture and agrifoods industry. These thematic areas include: strengthening local production, focusing on our consumers, supporting innovation and business management and planning for the long-term sustainability and growth of agriculture and agrifoods in the province.

Forestry and Agrifoods Agency

Objective, Measure and Indicators – 2010-11

Objective:

By March 31, 2011, the Forestry and Agrifoods Agency will have implemented initiatives to support research and development, increased industry capacity, diversification and promotion of the province's agriculture and agrifoods industry.

Measure: Implemented initiatives to support research and development, increased industry capacity, diversification and promotion of the province's agriculture and agrifoods industry

Indicators:

- Expanded the reach and coverage of the Agriculture and Agrifoods Research and Development Program
- Supported initiatives related to Agritourism, Agriculture in the Classroom and Strategic Business Development
- Conducted survey and analyzed results of the current marketing practices of producers within the province to identify key focus areas
- Developed an implementation plan to support the advancement of the agriculture and agrifoods industry

Issue 2: Competitiveness in the Forestry Sector

The Forestry and Agrifoods Agency is looking at future opportunities for the advancement of the forestry industry in Newfoundland and Labrador. The development of a comprehensive marketing strategy and the identification of key market opportunities for value-added production are critical components towards increased competitiveness in the forestry sector. We will continue to work with industry to facilitate growth and innovation within the sector.

Goal:

By March 31, 2011, the Forestry and Agrifoods Agency will have identified innovative opportunities for value-added production and contributed to the optimization of the benefits received from the forestry resources of the province.

Objective:

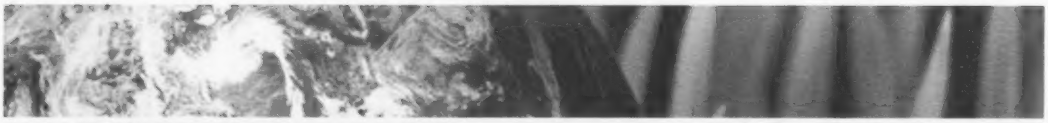
By March 31, 2010, the Forestry and Agrifoods Agency will have identified additional market opportunities for value-added production in the forestry industry.

Measure: Identified additional market opportunities for value-added production

Progress 2009-10

1. Supported the completion of a comprehensive marketing strategy

To support the development of a provincial marketing strategy for the solid wood products sector, the agency employed the services of an external consultant to prepare a report on potential markets for new wood products. The report was completed in late 2009 and identified key market opportunities for value-added production. Upon receipt of this report, agency staff began work on the development of a comprehensive marketing strategy for the sector. The consultant's report, as well as recommendations from the Forest Industry Diversification Program (FIDP) Marketing Committee, are key components which will support the development and completion of this strategy.



2. Identification of key market opportunities for value-added production.

The commissioned report on potential markets for new wood products as completed in late 2009 was tasked with identifying new forest-based products. These opportunities and future development of markets have been explored in detail by Forestry Services employees while preparing the framework of the agency's comprehensive marketing strategy.

Objective, Measure and Indicators – 2010-11

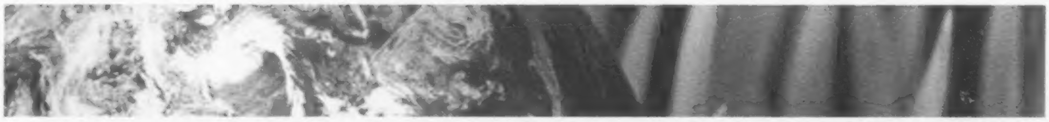
Objective:

By March 31, 2011, the Forestry and Agrifoods Agency will have undertaken measures to improve the competitiveness of the forestry industry.

Measure: Initiate actions related to key market opportunities to improve the competitiveness of the forest industry

Indicators:

- Initiated market plans for two of the five identified opportunities
- Initiated the process for the adoption of an environmental management system for Crown Tenures
- Increased wood supply via purchasing cutting rights from Corner Brook Pulp and Paper Limited



Issue 3: Sustainable Resource Management

Forestry, agriculture and agrifoods resources are important contributors to Newfoundland and Labrador's economy. It is vital that, as an agency, we support programs and services pertaining to the sustainability of our resources for future generations. The initiatives that were implemented this fiscal year included focusing on agricultural land use assessment and facilitation, Aleutian disease management in the mink sector, National Forest Pest Strategy (NFPS) initiatives implementation and commencement of crown management responsibilities on former private tenure. We will continue to work with industry to promote the long-term sustainability of our resources.

Goal:

By March 31, 2011, the Forestry and Agrifoods Agency will have enhanced sustainable resource management measures for the province's forestry, agriculture and agrifoods sectors.

Objective:

By March 31, 2010, the Forestry and Agrifoods Agency will have commenced implementation of priority measures to enhance resource sustainability.

Measure: Commenced implementation of priority measures to enhance resource sustainability

Progress 2009-10

1. **Assessment and facilitation of land use interests and acquisitions.**

   Initial assessment and mapping of agricultural areas of interest within the province, based on mineral soil and land use information, has been completed. Mapping will be upgraded periodically as new information and data become available. Data input and mapping of organic soils (peatland) within the province, including organic soils of agricultural interest, is ongoing using various sources of data and upgraded as new information and data become available. Land use acquisitions for agricultural

production were assessed and allocated to producers by a public Call for Proposals.

2. **Further implementation of Aleutian Disease Management Program**

The ADMP was a two-year program designed as an emergency response to the threat of Aleutian disease to Newfoundland and Labrador's mink industry. During the 2009-10 fiscal year, twelve mink producers and the NLFBA received $1,124,325 for project work. Producer projects centered on biosecurity improvements which included fence construction and improvements to sheds and buildings and awareness of Aleutian disease. ADMP funds were also provided for disinfection, clean-up of infected farms and replacement of breeding stock.

3. **Implementation of initiatives through the National Forest Pest Strategy**

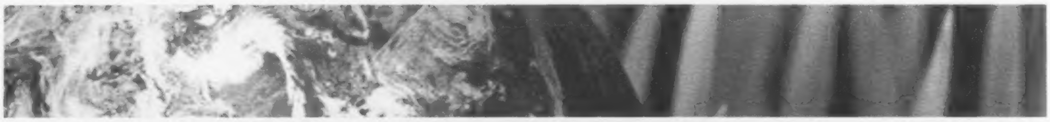
Under the NFPS an agreement was reached between Newfoundland and Labrador and Canada for funding for a contract position (Forester III) to work on a series of initiatives focused on forest insect and disease management. These initiatives included:

- Establishing a framework for monitoring pests in managed stands;
- Participation and contribution at NFPS technical workshops and meetings;
- Gathering information for a multi-jurisdictional risk assessment of Eastern spruce budworm;
- Establishing a framework for monitoring forest pests in Labrador; and
- Training and capacity building in the areas of pest identification and diagnostics.

Significant progress was made on each of the initiatives which shall assist the agency in the management of forest insect and disease.

4. **Commenced crown management responsibilities on former private tenure.**

The agency commenced responsibility for various regional services including completion of three resource road projects on former Abitibi limits in central Newfoundland, completion of a silviculture assessment to identify viable pre-commercial thinning areas and the initiation of a regeneration assessment of former



Abitibi limits to identify potential areas that need to be planted.

The Provincial Government also issued an Expression of Interest for the development of forest resources in central Newfoundland and Labrador. Nine applications were received and proposals have been evaluated.

Objective, Measure and Indicators – 2010-11

Objective:

By March 31, 2011, the Forestry and Agrifoods Agency will have enhanced sustainable management measures for the forestry, agriculture and agrifoods sectors.

Measure: Enhanced sustainable management measures for forestry, agriculture and agrifoods sectors.

Indicators:

- Continued advancement of forestry industry opportunities in central Newfoundland and in Labrador
- Completed the development of a new five-year plan for central Newfoundland and through environmental assessment
- Revised land base and a new Annual Allowable Cut for the island portion of the province
- Modernized and diversified the sawmilling sector through Forest Industry Diversification Fund lead initiatives
- Prepared Provincial Sawmilling and Value Added Marketing Strategy
- Completed a framework for an environmental management system for Crown tenure
- Requested approval to draft a new Sustainable Forestry Act
- Completed a regeneration assessment of former private tenure
- Continued implementation of the Agriculture Sustainability Program
- Worked internally and with other departments and agencies to assess land identified for agricultural purposes and address competing land usages

Strategic Directions

The outcomes achieved by the Forestry and Agrifoods Agency with respect to their objectives for the year are consistent with the Minister's strategic directions for the strategic planning period. Many of the successes referenced below are covered in more detail in the Outcomes of Objectives section but are included here to illustrate their strategic importance.

Increased Forestry, Agriculture and Agrifoods Development and Diversification

Agriculture and agrifoods industry stakeholders were consulted to identify key priority areas for advancement of the industries. The consultations are the bases for the long term planning for the agriculture and agrifoods industry.

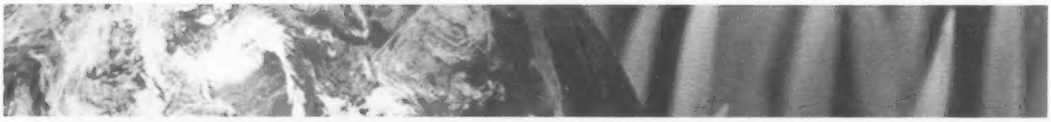
The agency in an effort to help diversify the forest industry commissioned a consultant to identify the primary market opportunities. The subsequent report with recommendations from the Forest Industry Diversification Program will provide the bases for the agency's marketing strategy. The strategy is expected to help industry stakeholders diversify their product lines in an effort ensure utilization of the province's timber resource and sustainability of the forest industry.

The agency undertook initial assessment and mapping of agriculture areas. Land use acquisitions for agricultural production were assessed and allocated to producers through a call for proposals. Assessing the land with regards to mineral soil and land use information are important attributes for sustainable agricultural development.

Improved Sustainable Resource Development and Usage for the Long Term Benefit of Residents of the Province

The agency's Aleutian disease management program assisted twelve mink producers with projects designed to help stop the spread of the Aleutian disease. Projects centered on biosecurity improvements. Assistance was also granted for disinfection, clean-up of infected farms and replacement on breading stock. These efforts help improve the sustainability of the resource.

The agency reached an agreement under the National Forest Pest Strategy with Canada. The agreement provided resources to work on a series of initiatives to help manage forest insects and diseases to help ensure a stable timber resource for future



development.

The agency commenced forest management activities on former private tenure and the provincial government issued an expression of interest for the development of the forest resource.

Additional Highlights and Accomplishments

Provincial Pellet Appliance Rebate Program

Typical Residential Pellet Stove

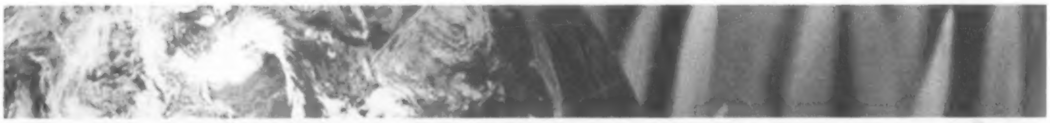
In an effort to help support the emerging wood pellet manufacturing sector in the province, the agency has provided a residential wood pellet appliance rebate program for the last two years. Homeowners who have purchased a pellet stove or furnace were eligible for a rebate of 25 per cent (up to $1,000 - $1,500) to help offset the capital purchase. By the end of 2009-10, some 400 homeowners had availed of the program. At an average consumption of 2.5 tonnes of pellets per year, the demand created has been in the order of a 1,000 tonnes, which is easily supplied by the two existing pellet plants. A survey of program participants determined a very high satisfaction rate with their stoves and a payback rate of two to three years based on current home heating oil prices. The next step in the process is to investigate the potential of light industrial conversions which would again assist in growing the demand for locally produced wood pellets.

> *"This program supports our commitment to energy efficiency and conservation, as well as to the diversification and growth of our value-added forest industry."*
>
> *Minister Dunderdale*

Stream Crossing Structure Inventory Completed

Steel Panel Bridge on a Resource Road

In 2009-10 the searchable GIS database of stream crossing structures was completed by the agency's Forest Engineering and Industry Services (FEIS) division. This database will house a record of the type and condition of all structures (bridges and large culverts) on Crown forest resource roads in Newfoundland and Labrador. It is based on a three-year field survey project where all structures were inspected and data entered into a specially designed GIS database. Each structure has been



coded based on their condition, spatially geo-referenced and linked to a digital photo directory. It will be an invaluable tool to resource managers for the planning of scheduled maintenance, replacement and possible decommissioning of these structures. Regular updating of the database will be performed by the FEIS Division.

Silviculture

Maintaining healthy forest ecosystems is a high priority within the agency. The Forestry Services Branch implements a province-wide silviculture program each year and facilitates the delivery of a parallel program by Corner Brook Pulp and Paper Limited (CBPPL) through a cost-sharing arrangement with that company. The provincial silviculture program is comprised of two classes of activity, reforestation and forest improvement. Reforestation activities are designed to establish new forests, typically on sites that were previously forested but also on sites that have been non-forested for a long period of time. In 2009-10, the Provincial Government spent almost $10.3 million in support of the silviculture program. This included $3.6 million paid out to CBPPL to implement their silviculture program. Approximately 12,000 hectares were silviculturally treated in Newfoundland and Labrador this year.

Seedling ready for Next Forest

> *"Our silviculture activities are an important component each year of forest management and sustaining our forest resources across the province."*
>
> *Minister Dunderdale*

Increasing Public Awareness of the Forestry Sector

The Forestry and Agrifoods Agency has identified increased public awareness of the importance of the province's forest resource as one key to ensuring a sustainable and viable forest industry. The agency undertook several public initiatives to promote the forestry industry in Newfoundland and Labrador including:

- In 2009, the second annual Forest Fair was held April 24-25 in Corner Brook to raise awareness of the importance of the industry to the province and the availability of high-quality locally-produced products. More than 800 school-aged students from the Western District participated in school tours. Scheduled demonstrations included tree breeding, tree planting and tree grafting; cooking with wild game and cooking with berries, and chainsaw safety. The public could try a harvesting simulator, view a working sawmill and a forest firefighting demonstration. Partners in Forest Fair include the Model Forest of Newfoundland and Labrador and CBPPL.

- The agency partnered with the Model Forest of Newfoundland and Labrador to develop and complete the Futures from Forests DVD which was released at Forest Fair 2009. The agency collaborated with CBPPL and the Department of Education on the DVD which will be used in the high school curriculum.
- In September, the agency participated in National Forest Week 2009, September 21-27. National Forest Week recognized the vital role the forest plays in Newfoundland and Labrador, providing social, cultural and economic benefits. It also encourages residents to reflect on what the forest industry means to our province, increases awareness of the value of the industry, and highlights the sustainable forest management practices that are taking place in Newfoundland and Labrador.
- The agency continued to advertise in several Newfoundland and Labrador publications during this period. This advertising focused upon sustainable management, enforcement and value-added products.
- The agency issued 80 news releases and advisories from April 1, 2009 to March 31, 2010 which varied from agency-related issues to public relations events like the poster contest held as part of National Forest Week.

Growing Forward

For 2009-10, Growing Forward (an agriculture framework agreement jointly funded by the federal and provincial governments at 60 per cent and 40 per cent respectively) expended $5,488,095 in the sector including investments for land development, innovation, food safety, environmental stewardship, and human resource development. Funding was provided to 210 projects such as travel and exchange for farmers, business plan development, enhanced feed storage and handling systems, and integrated pest management systems such as eco-

Potato Field

weeders. Projects also included irrigation systems, innovative crop harvesting systems, and electric fencing for the vegetable sector to reduce wildlife damage.

Growing Forward is intended to accelerate the pace of innovation, promote environmentally-responsible agriculture, enable competitive enterprises and sectors, enhance the safety and security of Canada's food system and minimize the occurrence and extent of risk incidents, among other priorities.

Business risk management programs such as AgriInsurance, AgriStability and AgriInvest continued to be supported in 2009-10. These programs are intended to protect against income declines and help stabilize a producer's income, as well as provide protection against crop production losses caused by uncontrollable natural perils such as drought, excessive moisture or disease. Twenty-eight producers were enrolled in AgriInsurance for the 2009 crop year and insurance was provided on 422 acres, for a total coverage value of $1 million.

> *"Government's investment in Growing Forward programming will continue to build a profitable and competitive agriculture and agrifoods industry."*
>
> *Minister Dunderdale*

Provincial Agrifoods Assistance Program

The Provincial Agrifoods Assistance Program provides financial support to promote the growth and commercialization of the agriculture sector. In 2009-10, $1,996,000 was invested in 168 projects across the province. Funding priority is placed on land development activities, including land clearing, enhancement, drainage, and on-farm access roads. Investment is also made in land development equipment such as rock rakes, harrows and limestone spreaders to increase productivity of our agricultural land base. The program provided funding to farmers for the construction of vegetable storages, greenhouses, and feed storages to increase the province's self-sufficiency in food production. In addition, support was provided to regional pastures to provide a low cost feed source for the sheep and beef sectors.

Self-Propelled Forage Harvester

Environmental Farm Plan Program

The Environmental Farm Plan (EFP) Program in Newfoundland and Labrador is funded entirely through a cost-shared agreement between the Government of Canada and the Government of Newfoundland and Labrador. The EFP Program is an educational program that provides producers the opportunity to identify potential risks on their farm in areas where improved environmental management practices could be incorporated. Producers from all commodity groups have continued to recognize the importance of Environmental Farm Planning and are taking many steps in ensuring the risk that their farm poses to the environment, their community and this province is minimal.

The EFP Program was promoted at two farm and garden shows, two annual meetings, and two workshops (including cranberry and composting) in 2009-10. In addition, 65 scans and 78 Environmental Farm Plans were completed in 2009-10.

Shared Commitments

In 2009-10, both the Forestry Services Branch and the Agrifoods Development Branch of the agency worked with their federal counterparts to further develop the forestry, agriculture and agrifoods sectors in Newfoundland and Labrador.

National Forest Pest Strategy

Under the National Forest Pest Strategy, the province entered into a contribution agreement with Natural Resources Canada (NRC) in the spring of 2009, to assist in the funding of a multi-facet project related to forest insect monitoring and control. All work was completed by a contract employee with the agency's Forest Engineering and Industry Services (FEIS) Division in Corner Brook. The project set a good foundation for FEIS Insect and Control staff to carry forward. The province was reimbursed $49,400 under the NFPS as part of NRC contribution.

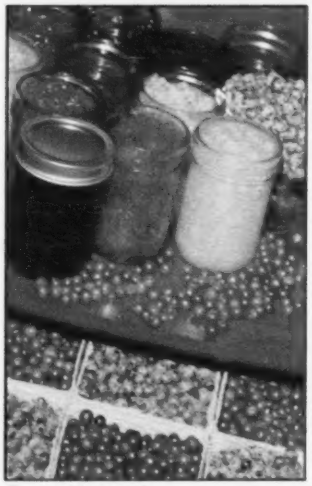
Growing Forward

Growing Forward, a federal-provincial agriculture framework agreement, will provide $29.58 million to the Newfoundland and Labrador agriculture and agrifoods industry over a five-year period. This cost-shared agreement is funded jointly by the federal and provincial governments (60 per cent and 40 per cent respectively) and will expire on March 31, 2013. This agreement funded 210 projects and expended $5,488,095 in the agriculture and agrifoods sector in this fiscal year. Funding was provided for an array of projects including irrigation systems, innovative crop harvesting systems and electric fencing for the vegetable sector to reduce wildlife damage.

Opportunities and Challenges

In the coming year, the agency will continue to support the sustainable economic advancement of the forestry, agriculture and agrifoods sectors throughout Newfoundland and Labrador. Our focus will be on working with the industries to address challenges and support opportunities. Our programs and services will continue to address the strategic goals as outlined in the agency's Strategic Plan 2008-2011.

A Secure, Economically Viable and Sustainable Source of Agriculture and Agrifood Products



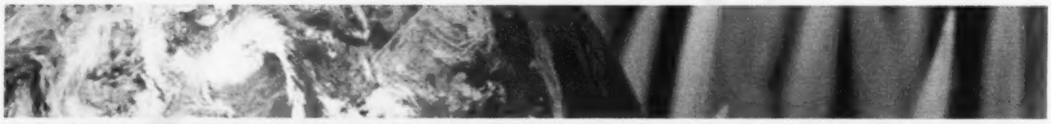
Berry Harvest

In today's global marketplace, it is important that Newfoundland and Labrador strengthen the local agriculture and agrifoods industry. The agriculture and agrifoods industry in this province continues to display growth. However, in order to continue to advance and remain sustainable, it is important that the agency continue to work with agribusinesses to address the challenges industry is facing and support the opportunities that our industry has identified.

Building our capacity through innovation, diversification, research and development are the catalysts for growth in our agriculture and agrifoods industry. Working with industry, we will continue to support key strategic initiatives that will provide opportunities for agribusinesses in Newfoundland and Labrador.

A Competitive and Sustainable Forestry Sector

The slow recovery of the global economy is still playing a significant role in contracting the forest industry. Continued movement forward with innovative value added opportunities such as machine strength rated lumber and wood pellet production will undoubtedly help diversify the Newfoundland and Labrador forest industry.



Forestry and Agrifoods Agency

The opportunity for forestry related research in the province through the Center for Forest Science and Innovation will help support sustainable forest management with science based decision making. Ensuring a healthy sustainable forest ecosystem is necessary to allow for forest industry development and investment. Working towards an environmental certification scheme on Crown land is an opportunity which should help to open markets and help diversify the forest industry.

Dense Softwood Forest ready for Thinning

Appendix I: Inactive Entities Reporting to the Minister

The following category three public bodies that report to the Minister of Natural Resources were inactive for the period April1, 2009 to March 31, 2010. In the event that one of these public bodies becomes active, it will prepare, and table in the House of Assembly, an Annual Performance Report.

Forest Land Tax Appeals Board

The Forest Land Tax Appeals Board was created pursuant to the *Forestry Act (1990)*. The mandate of the board is to hear appeals from landholders who disagree with the way in which Part III of the *Forestry Act (1990)* is applied. Appeals may concern: the contents of a Certificate of Managed Land issued to the appellant; entries made with respect to the appellant in the Assessment Roll; the amount of tax payable by the appellant; or whether or not the appellant is even liable for taxation under Part III of the act.

Timber Scalers Board

The Timber Scalers Board was created pursuant to the *Forestry Act (1990)*. Under section 124 of the act, the duties of the board are to: examine the ability and knowledge of persons who apply to be certified to scale timber; hear appeals to scaling disputes; and recommend to the minister new scaling methods before they are used.

Newfoundland and Labrador Farm Products Corporation

The Newfoundland and Labrador Farm Products Corporation was created pursuant to the *Farm Products Corporation Act*. The corporation has a mandate to establish abattoirs, cold storage plants, warehouses, packing and processing plants and other buildings and establishments of every kind necessary and suitable for the handling, preparation, processing and storage of farm products of every kind both animal and vegetable for the purpose of facilitating the development of farm products in the province. Associated activities may include: making advances of livestock to farmers and livestock keepers, either for cash or on credit; employing instructors to instruct farmers and livestock keepers; purchasing, storing, processing, packing and selling arm products of every kind; and handling, storing and selling or advancing on credit animal feeding stuffs or every kind.

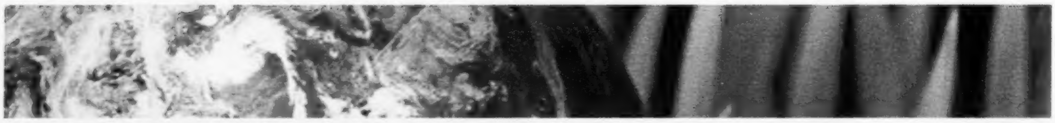
The Lieutenant-Governor in Council may appoint not fewer than five nor more than nine members to the Newfoundland and Labrador Farm Products Corporation. One person is to be chairperson. The members of the corporation, with the exception of the chairperson, shall be appointed for one year and are eligible for reappointment.

Appendix II: Statement of Revenues and Expenditures

Expenditure and revenue figures included in this document are based on public information provided in the Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund for Fiscal Year Ended 31 March 2010.

STATEMENT OF EXPENDITURE AND RELATED REVENUE SUMMARY FOR THE YEAR ENDED MARCH 31, 2010 (Unaudited)

			Estimates	
		Actual($)	Amended($)	Original ($)
Executive and Support Services				
1.1.01	Minister's Office	454,500	455,400	433,100
1.2.01	Executive Support	2,995,818	3,003,800	2,292,000
1.2.02	Administrative Support	1,209,590	1,235,800	1,503,800
	Less: Revenue	(988)	(10,000)	(10,000)
1.2.03	Administrative Support (Capital)	1,361,943	1,604,700	1,604,700
	Total	6,020,863	6,289,700	5,823,600
Forest Management and Protection				
Forest Management				
2.1.01	Administration and Program Planning	8,261,307	10,299,800	11,013,500
	Less: Revenue	(87)	-	-
2.1.02	Operations and Implementation	12,915,012	13,077,300	12,387,400
	Less: Revenue	(4,215)	-	-
2.1.03	Silviculture Development	10,264,299	10,902,200	10,902,200
	Less Revenue	(9,175)	(1,000)	(1,000)
2.1.04	Resource Roads Construction	5,747,748	5,902,600	5,902,600
	Less Revenue	(1,685,000)	(1,685,000)	(1,685,000)
2.1.05	Forest Industry Diversification	8,950,000	13,500,000	13,500,000
	Less Revenue	(4,000,000)	(4,000,000)	(4,000,000)



			Estimates	
		Actual($)	Amended($)	Original ($)
Forest Protection				
2.2.01	Insect Control	3,475,838	3,639,000	3,639,000
	Less: Revenue	-	(924,500	(924,500)
2.2.02	Fire Suppression and Communications	3,999,025	4,241,000	4,241,000
	Total	47,914,752	54,951,400	54,975,200
Agrifoods Development				
Land Resource Stewardship				
3.1.01	Land Resource Stewardship-Administration	1,905,381	2,067,600	2,087,600
	Less: Revenue	(6,383)	(33,000)	(33,000)
3.1.02	Limestone Sales	279,134	442,300	442,300
	Less: Revenue	(102,486)	(140,000)	(140,000)
3.1.03	Land Development	2,488,748	3,000,000	3,000,000
Production and Market Development				
3.2.01	Production and Market Development- Administration	3,511,981	7,118,800	6,833,800
	Less: Revenue	(18,098)	(454,700)	(454,700)
3.2.02	Marketing Board	105,548	173,600	173,600
Agricultural Business Development				
3.3.01	Agricultural Business Development Administration	1,670,593	1,821,200	1,937,200
	Less Revenue	-	(16,000)	(16,000)
3.3.02	Production and Livestock Insurance	305,030	419,800	419,800
	Less: Revenue	-	(202,800)	(202,800)
3.3.03	Agricultural Initiatives	1,996,000	2,250,000	2,250,000

			Estimates	
		Actual($)	Amended($)	Original ($)
3.3.04	Agriculture and Agrifoods Development Fund	1,337,807	4,000,000	4,000,000
3.3.05	Growing Forward Framework	5,486,509	6,500,000	6,500,000
	Less: Revenue	(640,901)	(3,910,000)	(3,910,000)
Animal Health				
3.4.01	Administration and Support Services	2,779,982	2,850,600	3,031,600
	Less: Revenue	(515,005)	(530,000)	(530,000)
3.5.01	Research and Development	727,637	1,032,000	1,000,000
	Total	21,311,477	26,389,400	26,389,400

Mineral Resource Management				
4.1.01	Geological Survey	5,639,146	5,729,300	5,734,300
	Less: Revenue	(1,329)	(34,000)	(34,000)
4.1.02	Mineral Lands	1,549,054	1,560,900	1,345,900
	Less: Revenue	-	(5,000)	(5,000)
4.1.03	Mineral Development	8,742,593	12,774,200	12,984,200
	Total	15,929,464	20,025,400	20,025,400
Energy Resources and Industrial Benefits Management				
5.1.01	Energy Policy	8,847,418	10,749,300	2,413,300
	Less Revenue	(159,648)	(350,000)	(350,000)
5.1.02	Petroleum Development	1,281,543	1,396,700	1,507,700
	Less: Revenue	(225)	-	-
5.1.03	Canada/Newfoundland and Labrador Offshore Petroleum Board	8,700,000	8,700,000	7,700,000
	Less. Revenue	(5,807,468)	(5,775,000)	(5,775,000)

			Estimates	
		Actual($)	Amended($)	Original ($)
5.1.04	Royalties and Benefits	5,146,164	5,664,500	5,731,800
	Less: Revenue	(43,033)	(330,000)	(330,000)
5.1.05	Energy Initiatives	6,505,562	8,310,000	9,310,000
5.1.06	Energy Initiatives - Capital	40,000,000	219,400,000	228,000,000
	Total	64,470,313	247,765,500	248,207,800
Total Department		155,646,869	355,421,400	355,421,400